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NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the  
present  
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded  
NEWS 5 SEP 29 DISSABS now available on STN  
NEWS 6 OCT 10 PCTFULL: Two new display fields added  
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced  
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced  
NEWS 9 NOV 24 MSDS-CCOHS file reloaded  
NEWS 10 DEC 08 CABA reloaded with left truncation  
NEWS 11 DEC 08 IMS file names changed  
NEWS 12 DEC 09 Experimental property data collected by CAS now available  
in REGISTRY  
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS  
NEWS 14 DEC 17 DGENE: Two new display fields added  
NEWS 15 DEC 18 BIOTECHNO no longer updated  
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer  
available  
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS  
databases  
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields  
NEWS 19 DEC 22 ABI-INFORM now available on STN  
  
NEWS EXPRESS DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003  
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FILE 'HOME' ENTERED AT 13:03:06 ON 20 JAN 2004

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ENTRY	SESSION
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FILE COVERS 1907 - 20 Jan 2004 VOL 140 ISS 4  
FILE LAST UPDATED: 19 Jan 2004 (20040119/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> copolymer
    514923 COPOLYMER
    172534 COPOLYMERS
L1    560886 COPOLYMER
      (COPOLYMER OR COPOLYMERS)

=> chitosan
    15876 CHITOSAN
    818 CHITOSANS
L2    15904 CHITOSAN
      (CHITOSAN OR CHITOSANS)

=> L1 and L2
L3    1376 L1 AND L2

=> antigen and L3
    247075 ANTIGEN
    196229 ANTIGENS
    306520 ANTIGEN
      (ANTIGEN OR ANTIGENS)
L4    25 ANTIGEN AND L3

=> "immunostimulatory nucleotide sequence"
    2099 "IMMUNOSTIMULATORY"
    337455 "NUCLEOTIDE"
    105919 "NUCLEOTIDES"
    388759 "NUCLEOTIDE"
      ("NUCLEOTIDE" OR "NUCLEOTIDES")
    575959 "SEQUENCE"
    413221 "SEQUENCES"
    684709 "SEQUENCE"
      ("SEQUENCE" OR "SEQUENCES")
L5    1 "IMMUNOSTIMULATORY NUCLEOTIDE SEQUENCE"
      ("IMMUNOSTIMULATORY" (W) "NUCLEOTIDE" (W) "SEQUENCE")

=> CpG
    7582 CPG
    241 CPGS
```

L6 7631 CPG  
(CPG OR CPGS)

=> L6 and L1  
L7 33 L6 AND L1

=> cytokine and L1  
72126 CYTOKINE  
111043 CYTOKINES  
137834 CYTOKINE  
(CYTOKINE OR CYTOKINES)  
L8 294 CYTOKINE AND L1

=> antigen and L8  
247075 ANTIGEN  
196229 ANTIGENS  
306520 ANTIGEN  
(ANTIGEN OR ANTIGENS)  
L9 104 ANTIGEN AND L8

=> polyoxyalkylene and L9  
36987 POLYOXYALKYLENE  
62863 POLYOXYALKYLENES  
76068 POLYOXYALKYLENE  
(POLYOXYALKYLENE OR POLYOXYALKYLENES)  
L10 24 POLYOXYALKYLENE AND L9

=> DIS L10 1- IBIB IABS  
YOU HAVE REQUESTED DATA FROM 24 ANSWERS - CONTINUE? Y/(N):Y  
THE ESTIMATED COST FOR THIS REQUEST IS 60.98 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L10 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:532329 CAPLUS  
DOCUMENT NUMBER: 139:106453  
TITLE: p-Amidobenzyl ethers of drugs in drug delivery systems  
INVENTOR(S): Senter, Peter D.; Toki, Brian E.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 43 pp., Cont.-in-part of U.S.  
Ser. No. 963,103.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003130189	A1	20030710	US 2002-252947	20020923
US 2003096743	A1	20030522	US 2001-963103	20010924
WO 2003026577	A2	20030403	WO 2002-US30282	20020924
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:  
US 2001-963103 A2 20010924  
US 2002-252947 A 20020923

OTHER SOURCE(S): MARPAT 139:106453

ABSTRACT:

Compns. contg. conjugates contg. a drug moiety, a ligand and an optional acyl unit, an amino acid or a peptide, an aminobenzyl ether self-immolative spacer group, an optional second self-immolative group, and carriers, diluents and/or excipients, and methods of delivery the drug are described. Thus, a peptide was treated with 1-naphthol to give a deriv. The compd. was very stable in human serum, and showed antitumor activity.

L10 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:261611 CAPLUS  
DOCUMENT NUMBER: 138:292740  
TITLE: p-Amidobenzyl ethers in drug delivery agents  
INVENTOR(S): Senter, Peter D.; Toki, Brian E.  
PATENT ASSIGNEE(S): Seattle Genetics, Inc., USA  
SOURCE: PCT Int. Appl., 109 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003026577	A2	20030403	WO 2002-US30282	20020924
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003096743	A1	20030522	US 2001-963103	20010924
US 2003130189	A1	20030710	US 2002-252947	20020923
PRIORITY APPLN. INFO.:			US 2001-963103 A	20010924
			US 2002-252947 A	20020923

OTHER SOURCE(S): MARPAT 138:292740

ABSTRACT:

Compds. [L-[-An-Z-X-Ww-]-D and B-[-Z-X-Ww-]-D, where D is a drug moiety, L is a ligand, B is a blocking group, A = acyl Z = amino acid or a peptide, X = aminobenzyl ether spacer group, W = optional second group, n = 0 or 1, and w = 0 or 1] and compns. of the compds. with carriers, diluents and/or excipients, and methods of delivery of the drugs are disclosed. Thus, etoposide was allowed to react with a peptide-contg. and the product obtained was shown to be very stable at pH 5.1 and 7.2 after 7 days.

L10 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:977595 CAPLUS  
DOCUMENT NUMBER: 138:44655  
TITLE: Adjuvant composition for mucosal and injection delivered vaccines  
INVENTOR(S): Gerber, Jay Dean  
PATENT ASSIGNEE(S): USA  
SOURCE: PCT Int. Appl., 33 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002102305	A2	20021227	WO 2002-US18158	20020611
WO 2002102305	A3	20030403		
WO 2002102305	B1	20030508		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003003105	A1	20030102	US 2001-884201	20010619
US 6676958	B2	20040113		
US 2003202979	A1	20031030	US 2003-426654	20030501
US 2003211115	A1	20031113	US 2003-431566	20030508

PRIORITY APPLN. INFO.:

US 2001-884201 A 20010619

## ABSTRACT:

An adjuvant for vaccines comprising lecithin and a polymer, whereby the polymer is preferably polyacrylic acid.

L10 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:832576 CAPLUS

DOCUMENT NUMBER: 137:346197

TITLE: Treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent

INVENTOR(S): Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony; Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas; Miller, Shoreh; Tang, Lei; Shahabuddin, Syed

PATENT ASSIGNEE(S): Epigenesis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 764 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085309	A2	20021031	WO 2002-US13143	20020423
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:

US 2001-286036P P 20010424

OTHER SOURCE(S): MARPAT 137:346197

## ABSTRACT:

This patent relates to a compn. comprising a carrier, oligonucleotides (oligos) that are antisense to adenosine receptors, and contain low amts. of or no adenosine (A), plus bronchodilating agents. All antisense oligonucleotides designed in accordance with the invention were highly effective at countering or reducing effects mediated by the receptors to which they are targeted. Two

antisense phosphorothioated oligos targeting human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor, and two targeting an A3 receptor are capable of countering the effect of exogenously administered adenosine which is mediated by the specific receptor they are targeted to. The activity of the antisense oligos are specific to the target and substitutively fail to inhibit another target. An oligonucleotide wherein the phosphodiester bonds are substituted with phosphorothioate bonds evidenced an unexpected superiority over the phosphodiester antisense oligo. In addn., they result in extremely low or non-existent deleterious side effects or toxicity. This represents 100% success in providing agents that are highly effective and specific in the treatment of bronchoconstriction and/or inflammation. These agents and the compn. and formulations provided are suitable for the treatment of respiratory tract, pulmonary and malignant diseases assocd. with bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others. The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L10 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:832575 CAPLUS

DOCUMENT NUMBER: 137:346196

TITLE: Treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent

INVENTOR(S): Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony; Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas; Miller, Shoreh; Tang, Lei; Shahabuddin, Syed

PATENT ASSIGNEE(S): Epigenesis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 872 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085308	A2	20021031	WO 2002-US13135	20020423
WO 2002085308	A3	20021219		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
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WO 2002085308	A2	20021031	WO 2002-XA13135	20020423
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
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 WO 2002085308 A2 20021031 WO 2002-XB13135 20020423  
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 WO 2002085308 A2 20021031 WO 2002-XC13135 20020423  
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 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 PRIORITY APPLN. INFO.: US 2001-286137P P 20010424  
 WO 2002-US13135 A 20020423

OTHER SOURCE(S): MARPAT 137:346196

# ABSTRACT:

This patent relates to a compn. comprising a carrier, oligonucleotides (oligos) that are antisense to adenosine receptors, and contain low amts. of or no adenosine (A), plus bronchodilating agents. All antisense oligonucleotides designed in accordance with the invention were highly effective at countering or reducing effects mediated by the receptors to which they are targeted. Two antisense phosphorothioated oligos targeting human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor, and two targeting an A3 receptor are capable of countering the effect of exogenously administered adenosine which is mediated by the specific receptor they are targeted to. The activity of the antisense oligos are specific to the target and substitutively fail to inhibit another target. An oligonucleotide wherein the phosphodiester bonds are substituted with phosphorothioate bonds evidenced an unexpected superiority over the phosphodiester antisense oligo. In addn., they result in extremely low or non-existent deleterious side effects or toxicity. This represents 100% success in providing agents that are highly effective and specific in the treatment of bronchoconstriction and/or inflammation. Treatment with antisense oligonucleotides in combination with anti-inflammatory steroid and/or ubiquinones is also provided. These agents and the compn. and formulations provided are suitable for the treatment of respiratory tract, pulmonary and malignant diseases assocd. with bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others. The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L10 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:716321 CAPLUS

DOCUMENT NUMBER: 137:246527

TITLE: Multivalent MHC constructs: Immunoanalysis, diagnosis

INVENTOR(S): and therapy  
Winther, Lars; Petersen, Lars Oestergaard; Buus,  
Soeren; Schoeller, Joergen; Ruub, Erik; Aamellem,  
Oeystein  
PATENT ASSIGNEE(S): Dako A/S, Den.; Dynal Biotech Asa  
SOURCE: PCT Int. Appl., 304 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072631	A2	20020919	WO 2002-DK169	20020313
WO 2002072631	C1	20021128		
WO 2002072631	A3	20031106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1377609	A2	20040107	EP 2002-706685	20020313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			DK 2001-435	A 20010314
			DK 2001-436	A 20010314
			DK 2001-441	A 20010314
			US 2001-275447P	P 20010314
			US 2001-275448P	P 20010314
			US 2001-275470P	P 20010314
			WO 2002-DK169	W 20020313

# ABSTRACT:

The authors disclose MHC mol. constructs (classical and non-classical) conjugated to sol. or insol. carriers wherein the affinity and avidity of the constructs exceed that of comparable MHC tetramers. In one example, the construct is comprised of biotinylated HLA-A2 bound to FITC-labeled streptavidin conjugated to sol. derivatized dextran. The above construct loaded with MART-1 or influenza virus peptides was shown to effect T-cell activation at a lower concn. than. Also comprised by the present invention is the sample-mounted use of MHC mols., MHC mol. multimers, and MHC mol. constructs.

L10 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:696640 CAPLUS  
DOCUMENT NUMBER: 137:222098  
TITLE: Shaped microparticles for pulmonary drug delivery  
INVENTOR(S): Tacon, William C.; Boiarski, Anthony A.; Grove, Carl F.; Brody, Richard S.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002128179      A1      20020912      US 2001-20464      20011130  
PRIORITY APPLN. INFO.:      US 2000-250717P      P      20001201

ABSTRACT:

Microparticles for use in the pulmonary delivery of a therapeutic material, comprising a polymer matrix, which is prefabricated to have a particular geometric shape including that of a disk cube, rectangle or snowflake. Addnl., these microparticles may include a winged structure to enhance the aerodynamic characteristics of said microparticle. Microfabrication methods for making these microparticles are provided.

L10 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:      2002:658588      CAPLUS  
DOCUMENT NUMBER:      137:184455  
TITLE:      Synthetic vaccine agents  
INVENTOR(S):      Nielsen, Klaus Gregorius; Koefoed, Peter  
PATENT ASSIGNEE(S):      Den.  
SOURCE:      U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S.  
                                 Ser. No. 785,215.  
                                 CODEN: USXXCO  
DOCUMENT TYPE:      Patent  
LANGUAGE:      English  
FAMILY ACC. NUM. COUNT:      4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119162	A1	20020829	US 2002-80101	20020219
WO 2001062284	A2	20010830	WO 2001-DK113	20010219
WO 2001062284	A3	20011129		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002185197      A1      20021212      US 2001-785215      20010220  
PRIORITY APPLN. INFO.:      WO 2001-DK113      A2      20010219  
                                 US 2001-785215      A2      20010220  
                                 DK 2001-1231      A      20010820  
                                 US 2001-337543P      P      20011022  
                                 DK 2000-265      A      20000221  
                                 US 2000-186295P      P      20000301

ABSTRACT:

The present invention provides for novel immunogens that are comprised of an activated polyhydroxypolymer backbone to which is attached 2 sep. antigenic determinants. The 1st antigenic determinant includes a B-cell or CTL epitope and the 2nd antigenic determinant includes a T-helper epitope. In preferred embodiments, the antigenic determinants are derived from different mols. and species. Exemplary immunogens of the invention are constituted of a linear tresyl-activated dextran backbone to which is coupled B-cell or CTL epitopes of an **antigen** and to which is also coupled universal T-helper epitopes. Also disclosed are immunogenic compns. comprising the immunogens, methods of immunization and a method for identification of suitable immunogens of the invention. The examples discuss the synthesis of a .beta.-amyloid peptide \*\*\*copolymer\*\*\* vaccine, antibody titer detn., and assays to monitor CTL activity.

L10 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:533944 CAPLUS  
 DOCUMENT NUMBER: 137:99052  
 TITLE: Hybrid matrix implants and explants  
 INVENTOR(S): Mineau-Hanschke, Rochelle  
 PATENT ASSIGNEE(S): Trans Karyotic Therapies, Inc., USA  
 SOURCE: U.S., 29 pp., Cont.-in-part of U. S. Ser. No. 312,246.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6419920	B1	20020716	US 1999-413715	19991005
US 5965125	A	19991012	US 1995-548002	19951025
NZ 502455	A	20010126	NZ 1996-502455	19961025
US 6472181	B1	20021029	US 1999-312246	19990514
WO 2001024842	A2	20010412	WO 2000-US27362	20001004
WO 2001024842	A3	20010830		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000078545	A5	20010510	AU 2000-78545	20001004
BR 2000014503	A	20020611	BR 2000-14503	20001004
EP 1221937	A2	20020717	EP 2000-968669	20001004
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003511100	T2	20030325	JP 2001-527841	20001004
US 2003091545	A1	20030515	US 2002-160452	20020531
US 2003077260	A1	20030424	US 2002-188628	20020702
US 6582391	B2	20030624		

PRIORITY APPLN. INFO.:  
 US 1995-548002 A3 19951025  
 US 1999-312246 A2 19990514  
 NZ 1996-321417 19961025  
 US 1999-413715 A1 19991005  
 US 2000-662037 A1 20000914  
 WO 2000-US27362 W 20001004

# ABSTRACT:

A compn. has a body of matrix material made up of insol. collagen fibrils, and disposed therewithin (a) a plurality of vertebrate cells; (b) a plurality of microspheres; and (c) an agent such as a factor that promotes vascularization, a **cytokine**, a growth factor, or ascorbic acid.

REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:466547 CAPLUS  
 DOCUMENT NUMBER: 137:37682  
 TITLE: Bioactive agent delivering system comprised of microparticles within a biodegradable to improve release profiles  
 INVENTOR(S): Shih, Chung; Zenter, Gaylen  
 PATENT ASSIGNEE(S): Macromed, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 559,507.

CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002076441	A1	20020620	US 2001-906041	20010713
US 6589549	B2	20030708		
US 6287588	B1	20010911	US 2000-559507	20000427
WO 2003005961	A2	20030123	WO 2002-US22017	20020712
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:  
US 2000-559507 A2 20000427  
US 1999-131562P P 19990429  
US 2001-906041 A 20010713

ABSTRACT:

A compn. and method for releasing a bio-active agent or a drug within a biol. environment in a controlled manner is disclosed. The compn. is a dual phase polymeric agent-delivery compn. comprising a continuous biocompatible gel phase, a discontinuous particulate phase comprising defined microparticles and an agent to be delivered. A microparticle contg. a bio-active agent is releasably entrained within a biocompatible polymeric gel matrix. The bioactive agent release may be contained in the microparticle phase alone or in both the microparticles and the gel matrix. The release of the agent is prolonged over a period of time, and the delivery may be modulated and/or controlled. In addn., a second agent may be loaded in some of the microparticles and/or the gel matrix. A microparticle reverse thermal gelation agent delivery system contained Zn-hGH incorporated into glycolide-lactide \*\*\*copolymer\*\*\* microspheres.

L10 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:220398 CAPLUS  
DOCUMENT NUMBER: 136:252466  
TITLE: Injectable hybrid matrix mixtures  
INVENTOR(S): Mineau-Hanschke, Rochelle; Lamsa, Justin Chace; Abalos-Coyle, Deborah  
PATENT ASSIGNEE(S): Transkaryotic Therapies, Inc., USA  
SOURCE: PCT Int. Appl., 98 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002022157	A2	20020321	WO 2001-US42085	20010910
WO 2002022157	A3	20030116		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,			

RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,  
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001095028 A5 20020326 AU 2001-95028 20010910  
PRIORITY APPLN. INFO.: US 2000-662037 A1 20000914  
WO 2001-US42085 W 20010910

ABSTRACT:

The invention features a method of delivering a polypeptide to an animal. The method involves introducing into the animal a fluid mixt. contg.: a population of cultured vertebrate cells genetically engineered to express the polypeptide; and a plurality of microcarriers.

L10 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:158298 CAPLUS  
DOCUMENT NUMBER: 136:189325  
TITLE: Delivery vehicle composition and methods for  
delivering **antigens** and other drugs  
INVENTOR(S): Blonder, Joan P.; Coeshott, Claire M.; Rodell, Timothy  
C.; Schauer, Wren H.; Rosenthal, Gary J.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S.  
Ser. No. 602,654.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002025326	A1	20020228	US 2001-888235	20010622
PRIORITY APPLN. INFO.:			US 2000-602654	A2 20000622
			US 2001-278267P	P 20010323

ABSTRACT:

The present invention provides an immunogen compn. and methods for using the same for the development of immunity, and particularly at mucosal sites in a mammal, thereby providing immunity at the site of entry for many major pathogenic organisms and also systemic immunity. The immunogen compn. includes an **antigen**, a biocompatible polymer, and a liq. vehicle, with the biocompatible polymer and liq. vehicle being present in such proportions and interacting in such a way that the immunogen compn. exhibits reverse-thermal viscosity behavior. A delivery vehicle compn. including a drug other than an **\*\*\*antigen\*\*\*** is also provided. Methods are provided for delivering the compns. of the invention to a host.

L10 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:157622 CAPLUS  
DOCUMENT NUMBER: 136:205500  
TITLE: Preparation of polymer surfaces for biocompatible  
materials  
INVENTOR(S): Ulbricht, Mathias; Thom, Volkmar; Jankova, Katja;  
Altankov, George; Jonsson, Gunnar  
PATENT ASSIGNEE(S): Surfarc Aps, Den.  
SOURCE: PCT Int. Appl., 217 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002015955	A2	20020228	WO 2001-DK557	20010823
WO 2002015955	A3	20020502		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2001081758	A5	20020304	AU 2001-81758	20010823
EP 1326655	A2	20030716	EP 2001-960202	20010823
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
PRIORITY APPLN. INFO.:			DK 2000-1250	A 20000823
			WO 2001-DK557	W 20010823

# ABSTRACT:

The present invention concerns a novel approach of creating biocompatible surfaces, the surfaces being capable of functionally interacting with biol. materials. The biocompatible surfaces comprise at least 2 components, such as a hydrophobic substratum and a macromol. of hydrophilic nature, which form together the novel biocompatible surfaces. The novel approach is based on contacting the hydrophobic substratum with a laterally patterned monomol. layer of the hydrophilic and flexible macromols., exhibiting a pronounced excluded vol. The 2-component surface thus formed, is, with respect to polarity and morphol., a molecularly heterogeneous surface. Structural features of the macromol. monolayer (e.g., the layer thickness or its lateral d.) are detd. by the structural features of the layer forming macromols. (their MW or their mol. architecture) and the method of creating the monomol. layer (e.g., by phys. or chem. sorption, or by chem. binding the macromols.). The structural features of the layer forming macromols.(s) is in turn detd. by synthesis. The amt. and conformation and also the biol. activity of biol. materials (e.g., polypeptides) which contact the novel biocompatible surface, is detd. and maintained by the cooperative action of the underlying hydrophobic substratum and the macromol. layer. It becomes possible to maintain and control biol. interactions between said contacted polypeptides and other biol. compds. e.g., cells, antibodies and the like. Consequently, the present invention aims to reduce and/or eliminate the deactivation and/or denaturation assocd. with the contacting of polypeptides and/or other biol. material to a hydrophobic substratum surface. Thus, .alpha.-4-azidobenzoyl-.omega.-methoxy PEG was prepd. and grafted to polysulfone surfaces and their wettability was detd. The adsorption properties of the grafted polymer were evaluated by exposing it to BSA soln.

L10 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:157550 CAPLUS  
 DOCUMENT NUMBER: 136:205415  
 TITLE: Microparticle compositions for targeted drug delivery  
 INVENTOR(S): Tracy, Mark A.; Scher, David S.  
 PATENT ASSIGNEE(S): Alkermes Controlled Therapeutics, Inc., USA  
 SOURCE: PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002015877 A2 20020228 WO 2001-US26094 20010821  
WO 2002015877 C1 20021121  
WO 2002015877 A3 20030227

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 6565888 B1 20030520 US 2000-644631 20000823

AU 2001085143 A5 20020304 AU 2001-85143 20010821

PRIORITY APPLN. INFO.: US 2000-644631 A1 20000823

WO 2001-US26094 W 20010821

# ABSTRACT:

The present invention relates to a sustained release compn. for the targeted delivery of biol. active agents to specific tissues and cells. The compn. comprises microparticles contg. a biocompatible polymer, a water-sol. polymer and a biol. active agent. In one embodiment, the biol. active agent is an \*\*\*antigen\*\*\* or an immunomodulator. In another embodiment, the biol. is a labile agent. The microparticles have a no. median diam. of >20 .mu. upon administration. The water-sol. polymer is present in the sustained released compn. in at least about 20 of the dry wt. of the microparticle. The sustained release compn. provides for the dissoln. of the water-sol. polymer of the compn. upon hydration, at a much greater rate than the degrdn. of the biocompatible polymer. This variance is soly. generates pseudo-microparticles which have a no. median diam. which is substantially smaller than the size of the administered microparticles. The pseudo-microparticles can be engulfed by \*\*\*antigen\*\*\* presenting cells of the immune system, or absorbed by the Peyer's patches in the gut. Trehalose-contg. microparticles were prepd. by using 10% soln. of the PLG in methylene chloride, and a suspension of the 38 .mu.m-sieved trehalose in the polymer soln.

L10 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:10235 CAPLUS

DOCUMENT NUMBER: 136:58777

TITLE: Methods for use of delivery composition for expanding, activating, committing or mobilizing one or more pluripotent, self-renewing and committed stem cells  
INVENTOR(S): Talmadge, James E.; Rosenthal, Gary J.; Etter, Jeffrey B.

PATENT ASSIGNEE(S): Rxkinetix, Inc., USA; Board of Regents of the University of Nebraska

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000173	A2	20020103	WO 2001-US20544	20010626
WO 2002000173	A3	20020613		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,  
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 2001073041 A5 20020108 AU 2001-73041 20010626  
 US 2002028515 A1 20020307 US 2001-893372 20010626  
 US 6649189 B2 20031118  
 US 2002102272 A1 20020801 US 2001-893339 20010626  
 PRIORITY APPLN. INFO.: US 2000-214298P P 20000626  
 US 2001-274891P P 20010309  
 WO 2001-US20544 W 20010626

ABSTRACT:

A hematopoietic growth factor delivery compn. includes a hematopoietic growth factor, a liq. vehicle, a first biocompatible polymer and a second biocompatible polymer. The compn. exhibits reverse-thermal viscosity behavior, due to interaction between the first biocompatible polymer and the liq. vehicle. The second biocompatible polymer helps to protect the first biocompatible polymer from being dissolved in vivo following administration to a host.

L10 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:935520 CAPLUS  
 DOCUMENT NUMBER: 136:68695  
 TITLE: Delivery vehicle composition and methods for delivering **antigens** and other drugs  
 INVENTOR(S): Rosenthal, Gary J.; Rodell, Timothy C.; Blonder, Joan P.; Coeshott, Claire M.; Schauer, Wren H.  
 PATENT ASSIGNEE(S): Rxkinetix, Inc., USA  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098206	A1	20011227	WO 2001-US20096	20010622
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1315672	A1	20030604	EP 2001-954595	20010622
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 2000-602654	A 20000622
			US 2001-278267P	P 20010323
			WO 2001-US20096	W 20010622

ABSTRACT:

The present invention provides an immunogen compn. and methods for using the same for the development of immunity, and particularly at mucosal sites in a mammal, thereby providing immunity at the site of entry for many major pathogenic organisms and also systemic immunity. The immunogen compn. includes an **antigen**, a biocompatible polymer, and a liq. vehicle, with the biocompatible polymer and liq. vehicle being present in such proportions and interacting in such a way that the immunogen compn. exhibits reverse-thermal viscosity behavior. A delivery vehicle compn. including a drug other than an **antigen** is also provided. Methods are provided for delivering the compns. of the invention to a host.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:338762 CAPLUS

DOCUMENT NUMBER: 134:362292

TITLE: Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile

INVENTOR(S): Farr, Spencer

PATENT ASSIGNEE(S): Phase-1 Molecular Toxicology, USA

SOURCE: PCT Int. Appl., 222 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032928	A2	20010510	WO 2000-US30474	20001103
WO 2001032928	A3	20020725		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-165398P P 19991105

US 2000-196571P P 20000411

#### ABSTRACT:

The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to det. the hypersensitivity of individuals to a given agent, such as drug or other chem., in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes assocd. with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes assocd. with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes assocd. with hypersensitivity. The expression of the genes predetd. to be assocd. with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and app. useful for identifying hypersensitivity in a subject are also disclosed.

L10 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:265288 CAPLUS

DOCUMENT NUMBER: 134:300844

TITLE: Hybrid matrices and hybrid matrix mixtures for delivering a polypeptide to an animal

INVENTOR(S): Mineau-Hanschke, Rochelle; Lamsa, Justin Chace; Abalos-Coyle, Deborah

PATENT ASSIGNEE(S): Transkaryotic Therapies, Inc., USA

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English



FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001024842	A2	20010412	WO 2000-US27362	20001004
WO 2001024842	A3	20010830		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6419920	B1	20020716	US 1999-413715	19991005
AU 2000078545	A5	20010510	AU 2000-78545	20001004
BR 2000014503	A	20020611	BR 2000-14503	20001004
EP 1221937	A2	20020717	EP 2000-968669	20001004
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003511100	T2	20030325	JP 2001-527841	20001004
PRIORITY APPLN. INFO.:			US 1999-413715	A1 19991005
			US 2000-662037	A1 20000914
			US 1995-548002	A3 19951025
			US 1999-312246	A2 19990514
			WO 2000-US27362	W 20001004

ABSTRACT:

A compn. having a body of matrix material made up of insol. collagen fibrils, and disposed there within: (a) a plurality of vertebrate cells; (b) a plurality of microcarriers; and (c) an agent such as a factor that promotes vascularization, a **cytokine**, a growth factor, or ascorbic acid. The invention also features a method of delivering a polypeptide to an animal. The method involves introducing into the animal a fluid mixt. contg.: (a) a population of cultured vertebrate cells genetically engineered to express the polypeptide; and (b) a plurality of microcarriers. Heparin-sepharose hybrid collagen matrixes were prepd. The heparin-sepharose beads were coated with bFGF (50 .mu.g/mL packed beads). The beads contg. human foreskin fibroblast clone expressing hFVIII at level between 20,000-30,000 mU/24h/106 cells were s.c. implanted into mice. The amt. of hFVIII prodn. was significantly higher than uncoated matrixes.

L10 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:790276 CAPLUS

DOCUMENT NUMBER: 133:340262

TITLE: Drug delivery system based on biodegradable polyester microparticles

INVENTOR(S): Shih, Chung; Zentner, Gaylen M.

PATENT ASSIGNEE(S): Macromed, Inc., USA

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066085	A1	20001109	WO 2000-US11387	20000428
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,			

LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6287588 B1 20010911 US 2000-559507 20000427  
 PRIORITY APPLN. INFO.: US 1999-131562P P 19990429  
 US 2000-559507 A 20000427

# ABSTRACT:

A compn. and method for releasing a bioactive agent or a drug within a biol. environment in a controlled manner is disclosed. The compn. is a dual phase polymeric agent-delivery compn. comprising a continuous biocompatible gel phase, a discontinuous particulate phase comprising defined microparticles and an agent to be delivered. A microparticle contg. a bio-active agent is entrained within a biocompatible polymeric gel matrix. The bio-active agent release may be contained in the microparticle phase alone or in both the microparticles and the gel matrix. The release of the agent is prolonged over a period of time, and the delivery may be modulated and/or controlled. In addn., a second agent may be loaded in some of the microparticles and/or the gel matrix. Zn-human growth hormone was incorporated into poly(DL-lactide-co-glycolide) microspheres. The microspheres were added to reverse thermal gelation soln. (RTG) (20% in 10 mM HEPES buffer, pH 7.0) to suspend the particles. The RTG-microparticle system of the present invention effectively reduced the initial burst effect of the microparticle delivery system.2 0  
 EXAMPLE.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:772489 CAPLUS  
 DOCUMENT NUMBER: 133:355232  
 TITLE: Enzymatically activated polymeric drug conjugates  
 INVENTOR(S): Pachence, James M.; Belinka, Benjamin A.; Ramani, Thulasi  
 PATENT ASSIGNEE(S): Veritas Medical Technologies, Inc., USA  
 SOURCE: PCT Int. Appl., 100 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064486	A2	20001102	WO 2000-US11670	20000428
WO 2000064486	A3	20010426		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1176985	A2	20020206	EP 2000-928630	20000428
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002542304	T2	20021210	JP 2000-613476	20000428
PRIORITY APPLN. INFO.:			US 1999-131404P	P 19990428
			US 1999-163090P	P 19991102
			WO 2000-US11670	W 20000428

ABSTRACT:

The present invention relates to a polymeric drug conjugate with one or more biol. active agents conjugated via an enzymically cleavable linker to either a regular repeating linear unit comprising a water sol. polymer segment and a multifunctional chem. moiety, or a branched polymer comprising two or more water sol. polymer segments each bound to a common multifunctional chem. moiety, as well as to methods of making such conjugates. The present invention is also directed to pharmaceutical compns. comprising such conjugates and to the use of such conjugates to treat pathol. conditions. A conjugate consisting of Fmoc-doxorubicin-14-O-hemiglutarate deriv. as an active agent, tetrapeptide Val-Gly-Pro-Ala as an enzymically cleaved linker, a multifunctional chem. moiety prep'd. from N-fluorenylmethoxycarbonyl-O-tert-butylserine, N-(benzyloxycarbonyl)-ethane-1,2-diamine, and tetrahydropyranyl ether, and polyethylene glycol 2000 was prep'd.

L10 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:717837 CAPLUS

DOCUMENT NUMBER: 131:314241

TITLE: Stabilized protein crystals, formulations containing them and methods of making them

INVENTOR(S): Margolin, Alexey L.; Khalaf, Nazer K.; St. Clair, Nancy L.; Rakestraw, Scott L.; Shenoy, Bhami C.

PATENT ASSIGNEE(S): Altus Biologics Inc., USA

SOURCE: PCT Int. Appl., 201 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955310	A1	19991104	WO 1999-US9099	19990427
W:				
AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330476	AA	19991104	CA 1999-2330476	19990427
AU 9937646	A1	19991116	AU 1999-37646	19990427
AU 757991	B2	20030313		
EP 1073421	A1	20010207	EP 1999-920064	19990427
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002512949	T2	20020508	JP 2000-545510	19990427
US 2002045582	A1	20020418	US 1999-374132	19990810
US 6541606	B2	20030401		
ZA 2000006023	A	20011113	ZA 2000-6023	20001026
US 2003175239	A1	20030918	US 2003-383266	20030305
PRIORITY APPLN. INFO.:			US 1998-83148P	P 19980427
			US 1998-224475	A2 19981231
			US 1997-70274P	P 19971231
			WO 1999-US9099	W 19990427
			US 1999-374132	A1 19990810

ABSTRACT:

Methods are provided for the stabilization, storage, and delivery of biol. active macromols., such as proteins, peptides and nucleic acids. Methods are provided for the crystn. of proteins and nucleic acids and for the prepn. of stabilized protein or nucleic acid crystals for use in dry or slurry

formulations in pharmaceutical and veterinary formulations, diagnostics, cosmetics, food, and agricultural feeds. The crystals are stabilized by addn. of excipients such as carbohydrates or by encapsulating them in a polymeric carrier. Methods are presented for encapsulating proteins, glycoproteins, enzymes, antibodies, hormones, and peptide crystals or crystal formulations into compns. for biol. delivery to humans and animals. Thus, lipase from *Candida rugosa* was dissolved in distd. water, treated with celite, adjusted to pH 4.8 with AcOH, filtered, ultrafiltered to remove proteins of <30 kDa mol. wt., and crystn. was initiated by addn. of 2-methyl-2,4-pentanediol. Sucrose was added to the mother liquor to a concn. of 10%, and the crystals were sepd. by centrifugation, suspended in EtOH, and air dried at room temp. Alternatively, the lipase crystals were crosslinked and encapsulated in lactic acid/glycolic acid **copolymer**; the microspheres formed were 90 .mu.m in diam.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:219995 CAPLUS

DOCUMENT NUMBER: 130:306599

TITLE: Antisense oligonucleotides capable of binding to multiple targets and their use in the treatment of respiratory disease

INVENTOR(S): Nyce, Jonathan W.

PATENT ASSIGNEE(S): East Carolina University, USA

SOURCE: PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913886	A1	19990325	WO 1998-US19419	19980917
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003087845	A1	20030508	US 1998-93972	19980609
CA 2304312	AA	19990325	CA 1998-2304312	19980917
AU 9893951	A1	19990405	AU 1998-93951	19980917
AU 752531	B2	20020919		
EP 1019065	A1	20000719	EP 1998-947089	19980917
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
BR 9812650	A	20000822	BR 1998-12650	19980917
JP 2003517428	T2	20030527	JP 2000-511506	19980917
PRIORITY APPLN. INFO.:			US 1997-59160P	P 19970917
			US 1998-93972	A 19980609
			WO 1998-US19419	W 19980917

ABSTRACT:

Antisense oligonucleotides carrying sequences that will allow them to bind to more than one mRNA in a target cell are described. Such oligonucleotides can be used as a single treatment for diseases having more than one contributing pathway. In particular, oligonucleotides effective against genes involved in the etiol. of respiratory disease are targeted. Preferably, the oligonucleotides are low in adenosine (.ltoreq.15%) and may have adenosines substituted with analogs. These oligonucleotides are targeted to high (G+C) sequences within mRNAs. Thus, phosphorothioate antisense oligonucleotide

(HAdA1AS, 5'-gatggagggcgccatggcggg-3') designed for the adenosine A1 receptor is provided. HAdA1AS significantly and specifically reduces the in vivo response to adenosine challenge in a dose-dependent manner, is effective in protection against aeroallergen-induced bronchoconstriction (house dust mite), has an unexpected long-term duration of effect (8.3 days for both PC50 adenosine and resistance), and is free of side effects that might be toxic to the recipient. Such oligonucleotides may be used for treating a disease or condition assocd. with lung airway, such as bronchoconstriction, inflammation, or allergies.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:705515 CAPLUS

DOCUMENT NUMBER: 123:250693

TITLE: Non-antigenic branched polymer conjugates for protein conjugation and stabilization and pharmaceutical applications

INVENTOR(S): Greenwald, Richard B.; Martinez, Anthony

PATENT ASSIGNEE(S): Enzon, Inc., USA

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511924	A1	19950504	WO 1994-US12237	19941024
W: AU, BG, BR, CA, CZ, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, PT, RO, RU, SE, SK, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5643575	A	19970701	US 1993-143403	19931027
AU 9480902	A1	19950522	AU 1994-80902	19941024
JP 09504299	T2	19970428	JP 1994-512785	19941024
EP 788515	A1	19970813	EP 1994-932032	19941024
EP 788515	B1	20010404		
R: CH, DE, DK, FR, GB, IE, LI, NL				
EP 1055685	A1	20001129	EP 2000-202355	19941024
R: CH, DE, DK, FR, GB, LI, NL, IE				
AT 243723	E	20030715	AT 1996-202288	19960814
PRIORITY APPLN. INFO.:				
			US 1993-143403	A 19931027
			EP 1994-932032	A3 19941024
			WO 1994-US12237	W 19941024
			EP 1996-202288	A 19960814

#### ABSTRACT:

Branched, substantially non-antigenic polymers are disclosed. These polymers can be described as branched, substantially non-antigenic polymers corresponding to the formula (R)<sub>n</sub>L-A wherein (R) includes a water-sol. non-antigenic polymer, n = 2 or 3, (L) is an aliph. linking moiety covalently linked to each (R), and (A) represents an activating functional group capable of undergoing nucleophilic substitution. Biol. active materials including proteins, peptides, enzymes, medicinal chems. or org. moieties can be conjugated with these polymers. Conjugates prepd. with the polymers and biol. active mols. such as proteins and peptides demonstrate extended circulating life in vivo. The present invention also includes methods of treating various maladies and conditions. Substantially fewer sites on the biol. active material are used as attachment sites. Methods of forming the polymer, conjugating the polymers with biol. active moieties and methods of using the conjugates are also disclosed.

L10 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:686597 CAPLUS  
DOCUMENT NUMBER: 121:286597  
TITLE: Preparation of superparamagnetic particles for  
diagnostic and therapeutic use  
INVENTOR(S): Pilgrimm, Herbert Dr  
PATENT ASSIGNEE(S): Silica gel GmbH Adsorptions-Technik, Germany  
SOURCE: Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4309333	A1	19940922	DE 1993-4309333	19930317
DE 4407338	A1	19950907	DE 1994-4407338	19940302
WO 9421240	A2	19940929	WO 1994-DE314	19940317
WO 9421240	A3	19941013		
W: JP, NO, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 689430	A1	19960103	EP 1994-912435	19940317
EP 689430	B1	19970813		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 08508721	T2	19960917	JP 1994-520523	19940317
AT 156706	E	19970815	AT 1994-912435	19940317
DE 4427821	A1	19960201	DE 1994-4427821	19940727
PRIORITY APPLN. INFO.:			DE 1993-4309333 A	19930317
			DE 1994-4407338 A	19940302
			WO 1994-DE314 W	19940317

ABSTRACT:

Superparamagnetic single-domain particles of Fe, Fe oxide, or mixed Fe oxides (particle size 3-20 nm) are prep'd. which bear surface-bound polyalkylene glycol (thio)phosphates or (thio)phosphonates, nucleotide or oligonucleotide phosphates, or carbohydrate phosphates contg. functional groups for attachment to pharmaceuticals or tissue-specific binding substances (e.g. **antigen**, antibody, nucleic acid, protein A, lectin). These particles may be used in combination with a magnetic field for destruction of tumors and stimulation of immune function (magnetic drug targeting), and for diagnosis.

=> DIS L7 1- IBIB IABS

YOU HAVE REQUESTED DATA FROM 33 ANSWERS - CONTINUE? Y/(N):Y  
THE ESTIMATED COST FOR THIS REQUEST IS 83.85 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L7 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:973810 CAPLUS  
TITLE: Effect of the entrapment of **CpG** sequence  
with cationic PLG nanoparticle on the immune responses  
of in mice  
AUTHOR(S): Lu, Xuebin; Li, Jiangling; Gao, Rong; Wu, Mei; Wu,  
Kaiyuan; Wang, Lihuan; Shen, Yi; Liu, Kun; Zheng,  
Yong; Liu, Shigui  
CORPORATE SOURCE: National Laboratory of Biocontrol Engineering of  
Grassland Pests, Sichuan University, Chengdu, 610064,  
Peop. Rep. China  
SOURCE: Gaojishu Tongxun (2003), 13(4), 62-66  
CODEN: GTONE8; ISSN: 1002-0470  
PUBLISHER: Gaojishu Tongxun Zazhishe  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese

ABSTRACT:

The effects of cationic glycolic acid-lactic acid **copolymer** nanoparticles and cationic liposome as package mols. on the cellular and humoral immune responses of mice to **CpG** ODN were studied. Compared with the control groups, the no. of immune cells, the amt. of IgG, the induced bioactivity of interleukin-2 (IL-2), and proliferation of spleen lymphocytes were significantly increased in mice immunized with the cationic PLG nanoparticle- entrapped **CpG**. The stimulation of cationic PLG nanoparticles was similar to or stronger than that of cationic liposome. All these suggested that cationic PLG nanoparticle could be used as effective package mol. to raise the immunostimulatory effect of **CpG** ODN to animals.

L7 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:656529 CAPLUS  
DOCUMENT NUMBER: 139:202454  
TITLE: Stabilized synthetic immunogen delivery system  
INVENTOR(S): Sokoll, Kenneth K.  
PATENT ASSIGNEE(S): United Biomedical Inc., USA  
SOURCE: PCT Int. Appl., 159 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068169	A2	20030821	WO 2003-US4711	20030214
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003165478	A1	20030904	US 2002-76674	20020214
PRIORITY APPLN. INFO.:			US 2002-76674	A 20020214

ABSTRACT:

The present invention provides an immunostimulatory complex specifically adapted to act as adjuvant and as a peptide immunogen stabilizer. The immunostimulatory complex comprises a **CpG** oligonucleotide and a biol. active peptide immunogen. The immunostimulatory complex is particulate and can efficiently present peptide immunogens to the cells of the immune system to produce an immune response. The immunostimulatory complex may be formulated as a suspension for parenteral administration. The immunostimulatory complex may also be formulated in the form of w/o-emulsions, as a suspension in combination with a mineral salt suspension or with an in-situ gelling polymer for the efficient delivery of an immunogen to the cells of the immune system of a subject following parenteral administration, to produce an immune response which may also be a protective immune response.

L7 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:476154 CAPLUS  
DOCUMENT NUMBER: 139:308188  
TITLE: The adsorption of cationic and amphoteric **copolymers** on glass surfaces: zeta potential measurements, adsorption isotherm determination, and

FT Raman characterization  
 AUTHOR(S): Tartakovsky, Alla; Drutis, Dane M.; Carnali, Joseph O.  
 CORPORATE SOURCE: Edgewater Laboratory, Unilever Research US, Edgewater,  
 NJ, 07020, USA  
 SOURCE: Journal of Colloid and Interface Science (2003),  
 263(2), 408-419  
 CODEN: JCISA5; ISSN: 0021-9797  
 PUBLISHER: Elsevier Science  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

The adsorption of cationic and amphoteric **copolymers** onto controlled pore glass (**CPG**) powders has been studied by measurement of the powder particle zeta (.zeta.) potential, by detn. of the adsorption isotherm, and by FT Raman measurements of the polymer-coated powder. The cationic polymers consisted chiefly of homopolymers of dimethyldiallylammonium chloride (DMDAAC) or **copolymers** of DMDAAC and acrylamide. The amphoteric polymers studied included **copolymers** of DMDAAC and acrylic acid. The comonomer ratio was varied to explore the dependence of cationic charge d. on the extent and effect of adsorption. Both types of polymers adsorb onto the anionic glass surface via an ion-exchange mechanism. Consequently, a correspondingly higher mass of a low-charge-d. **copolymer** adsorbs than of a cationic homopolymer. The presence of the anionic portion in the amphoteric polymers does not significantly alter this picture. The .zeta. potential, however, reflects the overall nature of the polymer. Cationic polymers effectively neutralize the glass surface, while amphoteric polymers leave the .zeta. potential net neg. Adsorption isotherms, detd. via the depletion technique using colloidal titrn., were used to "calibrate" a FT Raman method. The latter was used to detd. the amt. of adsorbed polymer under soln. conditions in which colloidal titrn. could not be performed.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:390455 CAPLUS  
 DOCUMENT NUMBER: 139:117715  
 TITLE: Silica-Immobilized Zinc .beta.-Diiminate Catalysts for  
 the Copolymerization of Epoxides and Carbon Dioxide  
 AUTHOR(S): Yu, Kunquan; Jones, Christopher W.  
 CORPORATE SOURCE: School of Chemical Engineering, Georgia Institute of  
 Technology, Atlanta, GA, 30332, USA  
 SOURCE: Organometallics (2003), 22(13), 2571-2580  
 CODEN: ORGN7; ISSN: 0276-7333  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

A synthetic protocol was developed to prep. silica-supported Zn-.beta.-diiminate catalysts for the copolymn. of cyclohexene oxide (CHO) and CO<sub>2</sub>. Multiple strategies were developed for the immobilization of these .beta.-diiminate zinc complexes onto the surface of model silica materials such as mesoporous SBA-15 and controlled-pore glass (**CPG**). The .beta.-diiminate ligand was modified to incorporate a C:C double bond or an alkane spacer with a trimethoxysilyl end group, allowing immobilization via direct reaction of the alkoxysilanes with silanols on the surface or via AIBN-promoted C:C bond coupling with thiol-functionalized silica. The immobilization process was followed using FT-Raman spectroscopy and thermogravimetric anal., whereas polymers were characterized by GPC and NMR. The resulting silica-supported catalysts exhibit good activity in the alternating copolymn. of CHO and CO<sub>2</sub>, leading to polymers with varying degrees of carbonate linkages (copolymn.) relative to ether linkages (homopolymn. of epoxide). Immobilizing the complexes on the silica support leads to catalysts that give more polymeric ether linkages than their corresponding homogeneous



analogs. Control studies indicate that this is due, at least in part, to starvation of the active site of CO<sub>2</sub>, esp. at later stages of the polymn. The synthetic protocol is focused on design of recoverable and potentially recyclable supported polymn. catalysts.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:929730 CAPLUS

DOCUMENT NUMBER: 139:185411

TITLE: Enhancement of immune responses by co-delivery of a **CpG** oligodeoxynucleotide and tetanus toxoid in biodegradable nanospheres

AUTHOR(S): Diwan, Manish; Tafaghodi, Mohsen; Samuel, John  
CORPORATE SOURCE: Faculty of Pharmacy and Pharmaceutical Sciences, 3118 Dentistry/Pharmacy Center, University of Alberta, Edmonton, AB, T6G 2N8, Can.

SOURCE: Journal of Controlled Release (2002), 85(1-3), 247-262  
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

Synthetic oligodeoxynucleotides (ODN) consisting of unmethylated bacterial DNA sequences with **CpG** motifs are potent immunol. adjuvants.

Immunostimulatory **CpG** sequences are species-specific. Optimal

\*\*\***CpG**\*\*\* sequences specific for humans, rodents, livestock, and companion animals have been reported. Nearly all of these reports describe the use of sol. forms of **CpG** ODN and antigens. We investigated the co-delivery

of **CpG** ODN and antigens in biodegradable nanospheres as an alternative approach for immunization using tetanus toxoid (TT) as the model antigen and ODN #1826 as the model **CpG** sequence. TT and **CpG**

ODN were co-encapsulated in poly(d,l-lactic-co-glycolic acid) nanospheres.

Sep. groups of C57BL/6 mice were s.c. immunized twice with TT and **CpG**

ODN in nanospheres (test group), TT alone in nanospheres, TT alone in

nanospheres mixed with **CpG** ODN in soln., TT and **CpG** ODN

both in soln. (ref. group), TT alone in soln., and alum adsorbed TT. T cells

isolated from the test group showed strong antigen-specific T cell

proliferation ex vivo (stimulation index=45). This was significantly

(P<0.0001) higher than that obsd. for T cells isolated from the ref. group.

The T cell proliferation of the test group was assocd. with higher levels of

interferon .gamma. secretion (IFN-.gamma. 2694.7+-41.1 pg/mL) than that of

the ref. group (814.7+-50.2 pg/mL). Interleukin 4 (IL-4) secretion, if any,

was below the detection limit (<13 pg/mL) in all the groups. Anti-sera

obtained from the test group also showed very high total IgG titers (end point

titers, 2 560 000) that were 16 times higher than the ref. group. Similarly,

differences of 8-fold for IgG1 and IgG3, and 5-fold for IgG2b titers were obsd.

Noticeably, the antibody response induced in the alum-TT group was far less

(total IgG, end point titers 160 000) than that obtained in the TT-**CpG**

ODN nanospheres group. Overall, the results show that co-delivery of

\*\*\***CpG**\*\*\* and TT resulted in induction of both T helper type 1 and type 2

(Th1 and Th2) immune responses with a bias towards Th1 type. These results

suggest that the co-delivery of **CpG** ODN adjuvants and antigens in

nanospheres is a more efficient approach for immunization than the use of

\*\*\***CpG**\*\*\* ODN and TT in soln.

REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:702502 CAPLUS

DOCUMENT NUMBER: 138:54096

TITLE: Influence of adjuvants in inducing immune responses to

different epitopes included in a multiepitope, multivalent, multistage Plasmodium falciparum candidate vaccine (FALVAC-1) in outbred mice

AUTHOR(S): Rafi-Janajreh, Asimah; Tongren, Jon Eric; Kensil, Charlotte; Hackett, Craig; Candal, Francisco; Lal, Altaf; Udhayakumar, Venkatachalam

CORPORATE SOURCE: Division of Parasitic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, 30341, USA

SOURCE: Experimental Parasitology (2002), 101(1), 3-12  
CODEN: EXPAAA; ISSN: 0014-4894

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: FALVAC-1, a vaccine against P. falciparum was developed by joining 21 epitopes from P. falciparum vaccine antigens and an universal T helper epitope from tetanus toxoid. Since adjuvants influence different aspects of immune responses, here the authors investigated the effect of 4 adjuvants aluminum hydroxide (alum), nonionic **copolymer** adjuvant P1005 (water-in-oil emulsion), **CpG** oligodeoxynucleotides (ODN), and QS-21 in eliciting immune responses in outbred mice. QS-21 and **copolymer** adjuvants were the best formulations in inducing higher and long-lasting antibody titers to the whole vaccine compared to alum and **CpG**. QS-21 was the only adjuvant to elicit predominantly IgG2a response and antibodies reactive with all epitopes incorporated in the vaccine construct. Vaccine elicited antibodies recognizing sporozoites and asexual blood-stage parasites. FALVAC-1 immunized mice induced lymphoproliferative and IFN- $\gamma$  response to the vaccine. QS-21 and **CpG** adjuvants were able to elicit T proliferative responses to 20 of the 22 epitopes in the vaccine. Thus, with suitable adjuvant such as QS-21, it is possible to elicit immune responses to most of the epitopes included in the FALVAC-1 vaccine.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

☒ ANSWER 7 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:350505 CAPLUS

DOCUMENT NUMBER: 138:112100

TITLE: Cationic microparticles are effective delivery systems for immune stimulatory cytosine-phosphate-uranosine ( **CpG**) DNA

AUTHOR(S): Kazzaz, J.; Singh, M.; Briones, M.; Ugozzoli, M.; O'Hagan, D.

CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94608, USA

SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 2, 1065-1066. Controlled Release Society: Minneapolis, Minn.  
CODEN: 69CNY8

DOCUMENT TYPE: Conference

LANGUAGE: English

ABSTRACT: A synthetic oligonucleotide contg. a previously identified adjuvant active \*\*\*CpG\*\*\* DNA sequence was formulated in PLG microparticles and evaluated for its ability to augment antibody and CTL responses to p55 gag from HIV-1 in mice and guinea pigs.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:158298 CAPLUS  
 DOCUMENT NUMBER: 136:189325  
 TITLE: Delivery vehicle composition and methods for delivering antigens and other drugs  
 INVENTOR(S): Blonder, Joan P.; Coeshott, Claire M.; Rodell, Timothy C.; Schauer, Wren H.; Rosenthal, Gary J.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S. Ser. No. 602,654.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002025326	A1	20020228	US 2001-888235	20010622
PRIORITY APPLN. INFO.:			US 2000-602654	A2 20000622
			US 2001-278267P	P 20010323

ABSTRACT:

The present invention provides an immunogen compn. and methods for using the same for the development of immunity, and particularly at mucosal sites in a mammal, thereby providing immunity at the site of entry for many major pathogenic organisms and also systemic immunity. The immunogen compn. includes an antigen, a biocompatible polymer, and a liq. vehicle, with the biocompatible polymer and liq. vehicle being present in such proportions and interacting in such a way that the immunogen compn. exhibits reverse-thermal viscosity behavior. A delivery vehicle compn. including a drug other than an antigen is also provided. Methods are provided for delivering the compns. of the invention to a host.

L7 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:800235 CAPLUS  
 DOCUMENT NUMBER: 137:24222  
 TITLE: Cationic microparticles are an effective delivery system for immune stimulatory **CpG** DNA  
 AUTHOR(S): Singh, Manmohan; Ott, Gary; Kazzaz, Jina; Ugozzoli, Mildred; Briones, Maylene; Donnelly, John; O'Hagan, Derek T.  
 CORPORATE SOURCE: Immunology and Infectious Diseases, Chiron Corporation, Emeryville, CA, 94608, USA  
 SOURCE: Pharmaceutical Research (2001), 18(10), 1476-1479  
 CODEN: PHREEB; ISSN: 0724-8741  
 PUBLISHER: Kluwer Academic/Plenum Publishers  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

ABSTRACT:

An expt. was conducted to improve the potency of **CpG** as a vaccine adjuvant using a delivery system to promote the uptake and delivery of **\*\*\*CpG\*\*\*** into APCs. The expt. also investigated the potential of cationic poly lactide-coglycolide microparticles (PLG/**CpG**) to induce enhanced antibody and cytotoxic T lymphocyte (CTL) responses to p55 gag and gp120 env from HIV-1 following i.m. immunization in mice. Results indicate that cationic PLG microparticles may represent an enabling technol. for **CpG** DNA adjuvants to be used in combination with HIV-1 p55 gag and env gp120 antigens. The need for effective delivery systems for **CpG** DNA adjuvants may prove to be a common observation for a wide range of antigens.

REFERENCE COUNT: 17  
 THERE ARE 17 CITED REFERENCES AVAILABLE IN THE RECORD. ALL CITATIONS AVAILABLE IN THE R

L7 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:641704 CAPLUS  
TITLE: Characterization of poly(ethylene glycol)-poly(L-lactide) diblock **copolymer** by phase fluctuation-size exclusion 2-D chromatography  
AUTHOR(S): Lee, Dean; Teraoka, Iwao; Fujiwara, Tomoko; Kimura, Yoshiharu  
CORPORATE SOURCE: Herman F. Mark Polymer Research Institute, Polytechnic University, Brooklyn, NY, 11201, USA  
SOURCE: Abstracts of Papers, 222nd ACS National Meeting, Chicago, IL, United States, August 26-30, 2001 (2001), PMSE-208. American Chemical Society: Washington, D. C.

CODEN: 69BUZP  
DOCUMENT TYPE: Conference; Meeting Abstract  
LANGUAGE: English  
ABSTRACT:

Chem. compn. distribution of a diblock **copolymer** of poly(ethylene glycol) and poly(L-lactide) (PEG-PLLA) was analyzed by phase fluctuation-size exclusion two-dimensional chromatog. Phase fluctuation chromatog. (PFC) separates a **copolymer** by chem. compn. on preparative scale. PFC takes advantage of compositional heterogeneity in semidilute soln. of the **\*\*\*copolymer\*\*\***. Controlled pore glass (CPG) attached with poly(L-lactide) brushes was used to pack a column. The compn. of eluted **\*\*\*copolymer\*\*\*** changed from low to high in the lactate content as demonstrated in the NMR anal. Size exclusion chromatog. anal. of the fractions indicates that the **copolymer** has two components. The highest-mol. wt. component is a **copolymer** grown on a dimeric product contained in the PEG5K precursor. The component with the lowest mol. wt. is PLLA homopolymer. The middle two components are a **copolymer** grown on the main PEG component. The two-dimensional chromatog. allows us to uncover components difficult to identify in regular characterization methods.

L7 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:585203 CAPLUS  
DOCUMENT NUMBER: 135:304346  
TITLE: Characterization of poly(ethylene glycol)-poly(L-lactide) diblock **copolymer** by phase fluctuation-size exclusion 2D chromatography  
AUTHOR(S): Lee, Dean; Teraoka, Iwao; Fujiwara, Tomoko; Kimura, Yoshiharu  
CORPORATE SOURCE: Polytechnic University, Brooklyn, NY, 11201, USA  
SOURCE: Polymeric Materials Science and Engineering (2001), 85, 342-343

CODEN: PMSEDG; ISSN: 0743-0515  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

Chem. compn. distribution of a diblock **copolymer** of poly(ethylene glycol) and poly(L-lactide) (PEG-PLLA) was analyzed by phase fluctuation-size exclusion two-dimensional chromatog. Phase fluctuation chromatog. (PFC) separates a **copolymer** by chem. compn. on preparative scale. PFC takes advantage of compositional heterogeneity in semidilute soln. of the **\*\*\*copolymer\*\*\***. Controlled pore glass (CPG) attached with poly(L-lactide) brushes was used to pack a column. The compn. of eluted **\*\*\*copolymer\*\*\*** changed from low to high in the lactate content as demonstrated in the NMR anal. Size exclusion chromatog. anal. of the fractions indicates that the **copolymer** has two components. The highest-mol. wt. component is a **copolymer** grown on a dimeric product contained in the PEG5K precursor. The component with the lowest mol. wt. is PLLA homopolymer. The middle two components are a **copolymer** grown on the main PEG component. The two-dimensional chromatog. allows us to uncover components difficult to identify in regular characterization methods.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:193929 CAPLUS

DOCUMENT NUMBER: 135:61966

TITLE: Thermodynamically "strong" and kinetically "fragile" polymeric glass exemplified by melamine formaldehyde resins

AUTHOR(S): Saiter, A.; Devallencourt, C.; Saiter, J. M.; Grenet, J.

CORPORATE SOURCE: Laboratoire d'Etude et de Caracterisation des Amorphes et des Polymeres, Faculte des Sciences, B.P. 118, Universite de Rouen, Mont-Saint-Aignan, 76821, Fr.

SOURCE: European Polymer Journal (2001), 37(6), 1083-1090  
CODEN: EUPJAG; ISSN: 0014-3057

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The variations of the heat capacity  $\Delta C_p = [C_p - C_{pg}]_{T=T_g}$  at the glass transition, and the value of the fragility index  $m$  were detd. for two melamine formaldehyde resins by calorimetric investigations. These values characterize resp. the thermodyn. aspect and the kinetic aspect of the Angell "Strong-Fragile" concept. For resins cured with a neutral pH, the 3D network formed is made of massive mol. units connected together by small length chains, and the values are  $\Delta C_p = 0.13 \text{ J K}^{-1} \text{ g}^{-1}$  and  $m = 143$ . For acid pH curing conditions, the 3D network is made of only massive mol. units connected together and we obtain  $\Delta C_p = 0.12 \text{ J K}^{-1} \text{ g}^{-1}$  and  $m = 35$ . By comparing our results with the results of the literature concerning three-dimensional networks and inorg. polymers, we are able to conclude that the relaxation occurs in these systems mainly by movements involving triazine rings.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:189175 CAPLUS

DOCUMENT NUMBER: 135:36068

TITLE: SAXS investigations of porous glasses with polymer layer

AUTHOR(S): Pikus, Stanislaw; Dawidowicz, A. L.; Kobylas, E.; Wianowska, D.

CORPORATE SOURCE: Faculty of Chemistry, Maria Curie Sklodowska University, Lublin, 20-031, Pol.

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2000), 4240(X-Ray Investigations of Polymer Structures II), 81-87  
CODEN: PSISDG; ISSN: 0277-786X

PUBLISHER: SPIE-The International Society for Optical Engineering

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The paper presents the small angle X-ray scattering (SAXS) studies of series of controlled porosity glasses (CPGs) with a polymer layer deposited on their surface which was obtained by crosslinking a dextran-polyimine mixt. For the investigated systems the power law scattering conditions ( $I(q) = I_0 q^{-\alpha}$ , where  $I_0$  and  $\alpha$  are the consts.,  $q$  is scattering vector) are fulfilled in a broad range of  $q$  values. The  $\alpha$  value in the range  $4 < \alpha < 6$  can result from the diffuse profile of the electron  $d$  in the boundary layer (transition layer) existing between the regions of different electron densities. For the investigated samples the values of  $\alpha$  exponent change according to amts. of polymer in samples on the range 3.97-4.49. Thus, the

thickness of the transition layer for samples with  $\alpha > 4.0$  was calcd. The correlation between the amt. of dextran or polyimine or crosslinking agent (diethyleneglycol diglycidyl ether) and the thickness of the transition layer was obsd. Also, the comparison of the surface areas of CPGs with surface polymer layer measured by means of SAXS and BET method was examd. The obtained results demonstrate that the use of the equation  $[J(q) = k_1/q + k_2/q^3]$  in SAXS calcns. results in SAXS surface areas comparable with those from BET measurements. In addn., the differences between them depend on the transition layer thickness as well as on compn. of the surface polymer layer. The presence of a transition layer on the polymer layer surface also explains the distinctions between the ion capacity of sorbents and the concn. of electron-donor nitrogen atoms existing in the investigated materials.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:719806 CAPLUS

DOCUMENT NUMBER: 134:339294

TITLE: Effect of immunological adjuvant combinations on the antibody and T-cell response to vaccination with MUC1-KLH and GD3-KLH conjugates

AUTHOR(S): Kim, S. K.; Ragupathi, G.; Cappello, S.; Kagan, E.; Livingston, P. O.

CORPORATE SOURCE: Laboratory of Developmental Tumor Vaccinology, Memorial Sloan-Kettering Cancer Center, New York, NY, 10021, USA

SOURCE: Vaccine (2000), 19(4-5), 530-537

CODEN: VACCDE; ISSN: 0264-410X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

A year ago we described a comparison of 19 immunol. adjuvants for their ability to augment antibody and T-cell responses against vaccines contg. two cancer antigens, GD3 ganglioside and MUC1 peptide, covalently attached to keyhole limpet hemocyanin (KLH). As in our previous experience, the saponin fraction QS-21 was the most potent single adjuvant but several other adjuvants also had potent adjuvant activity. Induction of an immune response against cancer antigens is generally difficult because these antigens are autoantigens. To get maximal benefit from the adjuvant component of cancer vaccines we have now tested whether combinations of the optimal adjuvants induced an improved immune response compared to QS-21 alone. Since over the intervening year a new semi-synthetic saponin adjuvant (GPI-0100) contg. the dodecylamide deriv. of hydrolyzed naturally-occurring saponins had become available, this was tested as well. Twelve different adjuvant combinations and GPI-0100 were compared for their ability to augment (1) antibody responses against GD3 and MUC1 and (2) T-cell responses against GD3, MUC1 and KLH. GPI-0100 and five adjuvant combinations were superior to QS-21 alone for induction of IgM and IgG antibodies against MUC1 and/or GD3: QS-21 plus bacterial nucleotide Cpg, QS-21 plus monophosphoryl lipid A (MPL), QS-21 plus non-ionic block \*\*\*copolymer\*\*\* CRL-1005, QS-21 plus Titermax and Titermax plus Cpg. Antibody responses were documented both by ELISA against purified antigens and by FACS for cell surface reactivity. There was no evidence for T-cell immunity against GD3 or MUC1. The antibody responses against GD3 and MUC1 were, however, strongly correlated with IFN- $\gamma$  release and DTH against KLH. These results demonstrate that combinations of immunol. adjuvants are able to augment antibody and T-cell responses to these conjugates beyond that attainable with QS-21 alone, and again confirm the abs. necessity of potent adjuvants or adjuvant combinations for optimal immunogenicity with conjugate vaccines.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:31877 CAPLUS  
DOCUMENT NUMBER: 132:191129  
TITLE: Protease Activity on an Immobilized Substrate Modified by Polymers: Subtilisin BPN'  
AUTHOR(S): Esker, Alan R.; Brode, Philip F., III; Rubingh, Donn N.; Rauch, Deborah S.; Yu, Hyuk; Gast, Alice P.; Robertson, Channing R.; Trigiant, Giuseppe  
CORPORATE SOURCE: Miami Valley Laboratories, The Procter & Gamble Company, Cincinnati, OH, 45253-8707, USA  
SOURCE: Langmuir (2000), 16(5), 2198-2206  
CODEN: LANGD5; ISSN: 0743-7463  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

We describe the adsorption and catalytic behavior of the serine protease subtilisin BPN' on controlled pore glass (CPG) beads with a short (aminopropyl) or a long (aminoalkyl CH<sub>2</sub> > 12) chain covalent link sepg. the reporter peptide succinyl-alanine-alanine-proline-phenylalanine-p-nitroanilide (sAAPFpNA) from the surface. The propyl-linked sAAPFpNA modified glass surface (aminopropyl CPG:sAAPFpNA) showed a 2-fold increase in protease adsorption over an aminopropyl-glass surface. In contrast, the sAAPFpNA surface with the long chain connector showed a 2-fold drop in adsorption relative to an aminoalkyl surface. BPN'-catalyzed hydrolysis rates showed an inverse relationship to adsorption. Water-sol. polymers [poly(vinylpyrrolidone) (PVP), poly(ethylene oxide) (PEO), poly(4-vinylpyridine-N-oxide) (PVPO) and a \*\*\*copolymer\*\*\* of 1-vinyl-2-pyrrolidone and 1-vinylimidazole (PVPVI)] neutralize the 2-fold increase in BPN' adsorption and provide more than a 3-fold increase in the initial rate of hydrolysis for BPN'-catalyzed cleavage of pNA. Another water-sol. polymer, poly(vinyl alc.) (PVA), causes only a slight adsorption decrease and hydrolysis increase for the BPN', aminopropyl \*\*\*CPG\*\*\* :sAAPFpNA system. None of the polymers causes a significant change in BPN'-catalyzed hydrolysis of, or adsorption on, aminoalkyl (CH<sub>2</sub> > 12) \*\*\*CPG\*\*\* :sAAPFpNA. The apparent mechanism behind these effects is one in which the long alkyl chains and adsorbed polymers decrease the amt. of adsorbed enzyme and increase the amt. available for reaction in soln. A model is presented which describes the relationship between adsorption and surface hydrolysis.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:659318 CAPLUS  
DOCUMENT NUMBER: 131:288452  
TITLE: Removal of quaternary ammonium halides from brines by adsorption on activated carbon and pyrolyzed sulfonic acid resin  
INVENTOR(S): Silva, James Manio  
PATENT ASSIGNEE(S): General Electric Company, USA  
SOURCE: PCT Int. Appl., 14 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9951523	A1	19991014	WO 1999-US5019	19990309
W: BR, CN, JP, KR, SG				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE  
 US 6214235 B1 20010410 US 1998-55461 19980406  
 EP 1070017 A1 20010124 EP 1999-909907 19990309  
 EP 1070017 B1 20020619  
 R: BE, DE  
 JP 2002510593 T2 20020409 JP 2000-542249 19990309  
 PRIORITY APPLN. INFO.: US 1998-55461 A 19980406  
 WO 1999-US5019 W 19990309

ABSTRACT:

Quaternary ammonium halides, of general formula  $XR_1NR_2R_3R_4X^-$  ( $X = Cl, Br, I,$  or  $F$ ;  $R_1 = C1-3$ -alkylene;  $R_2, R_3, R_4 = C1-6$ -alkyl) are removed from brines by passage of the brine through an adsorbent, selected from activated carbon, an ion-exchange resin, and/or a carbonaceous synthetic adsorbent, at from  $-10$ .degree. to  $90$ .degree., pH 1-13, and a feed rate of 2-40 bed vols./h. The synthetic adsorbent is preferably pyrolyzed sulfonated styrene-divinylbenzene \*\*\*copolymer\*\*\*. The method is esp. useful in removing quaternary ammonium halides (esp. chloromethyltrimethyl ammonium chloride), present at .ltoreq.1000 ppm, from brines in the chlor-alkali electrolysis process.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:126938 CAPLUS

DOCUMENT NUMBER: 130:178323

TITLE: Biomonomers-polymer conjugate attached to solid support by cleavable linkage and its use for biopolymer synthesis for amplification, detection and/or capturing of target molecules

INVENTOR(S): Minard, Claire; Chaix, Carole; Delair, Thierry; Mandrand, Bernard

PATENT ASSIGNEE(S): Bio Merieux, Fr.

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9907749	A1	19990218	WO 1998-FR1731	19980803
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FR 2767137	A1	19990212	FR 1997-10300	19970807
AU 9889876	A1	19990301	AU 1998-89876	19980803
EP 1001996	A1	20000524	EP 1998-941531	19980803
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
US 2002055185	A1	20020509	US 2000-485154	20000204

PRIORITY APPLN. INFO.:

FR 1997-10300 A 19970807  
 WO 1998-FR1731 W 19980803

ABSTRACT:

The invention concerns a complex chem. compd. comprising a solid carrier and at least a conjugate consisting of an org. polymer and a plurality of priming biomonomers. The invention also concerns the synthesis of said chem. compd. for biopolymer synthesis and the use of said complex chem. compd. after synthesis as ligand for amplifying or detecting and/or capturing target mols.



The polymer-biopolymer conjugate may optionally be cleaved from the solid support without affecting the bioactivity of the biopolymer. Thus, oligonucleotides complementary to hepatitis B virus DNA were synthesized on **\*\*\*CPG\*\*\*** to which a layer of maleic anhydride-Me vinyl ether **\*\*\*copolymer\*\*\*** was attached. First, 5'-dimethoxytrityl-2'-deoxythymidine-3'-(6-aminohexyl)phosphate was prep'd. and attached to the **copolymer**. Then the **CPG** was activated and reacted with glucidoxypyltrimethoxysilane followed by hexaethylene glycol. The derivatized **CPG** was then reacted with the dT-polymer conjugate and this was used for the oligonucleotide synthesis.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:737115 CAPLUS

DOCUMENT NUMBER: 130:81786

TITLE: Oligonucleotide synthesis on maleic anhydride **copolymers** covalently bound to silica spherical support and characterization of the obtained conjugates

AUTHOR(S): Chaix, Carole; Minard-Basquin, Claire; Delair, Thierry; Pichot, Christian; Mandrand, Bernard

CORPORATE SOURCE: Laboratoire de Chimie et Biochimie Macromoléculaire, UMR 103-bioMerieux, Ecole Normale Supérieure de Lyon, Lyon, F-69364, Fr.

SOURCE: Journal of Applied Polymer Science (1998), 70(12), 2487-2497

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

A new route was proposed to make polymer-oligonucleotide conjugates of potential applications in diagnostics. It consisted in direct synthesis of oligonucleotides onto controlled pore glass surface grafted with poly(maleic anhydride-alt-Me vinyl ether) (P[MAMVE]) or poly(maleic anhydride-alt-ethylene) (P[MAE]). The anhydride moieties were used for both the covalent coupling of the **copolymer** via ester bond and binding of 5'-dimethoxytrityl thymidine 3'-(6-amino-hexyl phosphate) initiator of oligodeoxynucleotide (ODN) synthesis via amide bond. The difference of stability between ester and amide links under basic treatment was used for the selective cleavage of (polymer-oligonucleotide) conjugates after DNA synthesis completion. We succeeded in grafting functionalized **copolymer** onto silica surface and synthesis of poly-thymidine 26-mer ODN was performed. After conc'd. ammonium hydroxide treatment, conjugate crude materials were characterized by size exclusion chromatog. coupled to multi-angle laser light scattering detection. The no. av. mol. wt. (.hivin.M.hivin.n) for conjugate with P[MAMVE] was abnormally lower than expected and was assigned to polymer degradn. using high pH conditions. Such a phenomenon did not occur with P[MAE]-poly-thymidine conjugate. However, in both cases, parasite ODN synthesis was also evidenced, which was attributed to thymidine phosphoramidite adsorption side reaction during DNA synthesis.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:691832 CAPLUS

DOCUMENT NUMBER: 130:29556

TITLE: SAXS investigation of the siliceous materials with surface polymer layers

AUTHOR(S): Pikus, S.; Dawidowicz, A. L.; Kobylas, E.; Wianowska, D.; Radkiewicz, S.

CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Sklodowska  
University, Lublin, 20-031, Pol.  
SOURCE: Applied Crystallography (1998), 17th, 212-215  
CODEN: APCRE2  
PUBLISHER: World Scientific Publishing Co. Pte. Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

The paper presents the results of the SAXS investigation of the materials in which a polymer layer obtained by crosslinking a dextran-polyimine mixt. is deposited on the surface of controlled porosity glasses (CPGs). The power-law scattering conditions are fulfilled for all investigated samples in a broad range of the vector scattering  $q$  values. The slope of  $\log I$  vs  $\log q$  plots for the examd. materials changes from 3.87 to 4.49. The value exceeding 4 suggests the existence of the diffuse profile of the electron  $d$ . in the boundary layer (transition layer). The correlation between the amt. of dextran or polyimine or crosslinking agent and the thickness of the transition layer is obsd. The similar correlation is also obsd. between the amts. of the polymer layer and values of the sp. surface area and the changes of the vol. pore size distribution function.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:157507 CAPLUS  
DOCUMENT NUMBER: 128:168461  
TITLE: Adhesive emulsions  
INVENTOR(S): Mafoti, Robson; Chao, Tien Chieh  
PATENT ASSIGNEE(S): Premark RWP Holdings, Inc., USA  
SOURCE: Eur. Pat. Appl., 20 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 822243	A2	19980204	EP 1997-112946	19970728
EP 822243	A3	20000823		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 5804618	A	19980908	US 1996-739399	19961031
PRIORITY APPLN. INFO.:			US 1996-688932	A 19960731
			US 1996-739399	A 19961031

ABSTRACT:  
Poly(vinyl acetate) emulsion-based adhesives can be made effective for bonding melamine-formaldehyde resin-treated decorative solid color (and print) paper to particleboard. The adhesives are formulated with tackified poly(vinyl alc.), starch, a tackifier, and a coupling agent. Stress cracking is substantially eliminated. Addnl., wrinkling and edge and corner peel resulting from the movement of sheets of melamine resin-treated paper on the top and bottom surfaces of sheets of particleboard through a heating and pressing zone is substantially eliminated.

L7 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1997:499306 CAPLUS  
DOCUMENT NUMBER: 127:173471  
TITLE: A vacuum minifiltration apparatus and its use in the  
purification of oligonucleotides  
INVENTOR(S): Kempe, Tomas  
PATENT ASSIGNEE(S): Barrskogen, Inc., USA; Kempe, Tomas

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9726540	A1	19970724	WO 1997-US441	19970114
W: JP, US, US, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5897838	A	19990427	US 1994-209786	19940311
US 5648271	A	19970715	US 1994-279444	19940725
PRIORITY APPLN. INFO.:			US 1994-209786	A2 19940311
			US 1994-279444	A2 19940725
			US 1996-588727	A2 19960119

ABSTRACT:

An app. and related system for processing of small (<1 mL) vols. of solns. are described. A preferred app. is provided in the form of a disposable tip comprising a polymeric housing having a rigid wall portion forming an internal passageway having a longitudinal axis, and a depth filter sealably positioned within the internal passageway. Optionally, the tip provides means for sealably attaching the tip to other devices, either directly or by means of suitable adaptors, at either or both ends of the passageway. The filtration tip can be used in a system of the invention for small scale incubation of samples, e.g., in the course of an assay, reaction, synthesis, binding, extn., clarification, concn. and the like. An app. that includes a hydrophobic support material finds particular use in a method for the prepn. of purified oligonucleotides.

L7 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:495929 CAPLUS

DOCUMENT NUMBER: 127:176978

TITLE: Fragility of polymeric liquids: correlations between thermodynamic and dynamic properties

AUTHOR(S): Colucci, Dina M.; McKenna, Gregory B.

CORPORATE SOURCE: Polymers Division, National Institute of Standards and Technology, Gaithersburg, MD, 20899, USA

SOURCE: Materials Research Society Symposium Proceedings (1997), 455 (Structure and Dynamics of Glasses and Glass Formers), 171-176

CODEN: MRSPDH; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The effect of polymer structure on fragility was detd. by relating the apparent fragility to the relaxation response, heat capacity, and thermal expansion. For the 14 polymers studied, the fragility ests. based on the relaxation behavior (log aT) correlated well with the thermodyn. ests. of .DELTA.Cp/Mo, and .DELTA..alpha.. In general, polymers with less sterically hindered repeat unit structures exhibited strong behavior. Polymers with sterically hindered backbones contg. oxygen or ringed structures in the backbone were consistently fragile using log aT, .DELTA.Cp/Mo, and .DELTA..alpha. as measures of fragility. On the other hand, using Cp/Cpg as a fragility criterion resulted in very different fragility classifications.

L7 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:430755 CAPLUS

DOCUMENT NUMBER: 127:216851

TITLE: Control of methylation spreading in synthetic DNA

AUTHOR(S): sequences by the murine DNA methyltransferase  
 Tollefsbol, Trygve O.; Hutchison, Clyde A., III  
 CORPORATE SOURCE: Dep. Microbiol. Immunol., Univ. North Carolina, Chapel  
 Hill, NC, 27599, USA  
 SOURCE: Journal of Molecular Biology (1997), 269(4), 494-504  
 CODEN: JMOBAK; ISSN: 0022-2836  
 PUBLISHER: Academic  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

Methylation spreading, which involves a propensity for the mammalian  
 DNA-(cytosine-5)-methyltransferase to de novo methylate cytosine-guanine  
 dinucleotides (**CpGs**) near pre-existing 5-methylcytosine bases, has  
 been implicated in the control of numerous biol. processes. We have assessed  
 methylation spreading by the murine DNA methyltransferase in vitro using  
 synthetic **copolymers** and oligonucleotides which differ only in their  
 methylation state. Double-stranded oligonucleotides were found to undergo  
 higher levels of de novo methylation overall than otherwise identical  
 single-stranded oligonucleotides. This difference reflects the greater no. of  
 de novo methylatable cytosine bases in double-stranded than single-stranded  
 sequences. All tested oligonucleotides contg. pre-existing  
 5-methyl-cytosine(s) were de novo methylated at several fold the rates of  
 non-methylated controls. No mammalian proteins besides the DNA  
 methyltransferase were required for this obsd. enhancement of de novo  
 methylation. Studies using oligonucleotides differing in patterns of  
 pre-methylation showed that methylation spreading can be initiated by  
 hemimethylated or duplex methylated **CpGs** indicating that recognition  
 of 5-methylcytosine by the enzyme is sufficient to stimulate methylation  
 spreading. Double and single-stranded oligonucleotides with several bases  
 between **CpGs** underwent considerably more de novo methylation per  
 \*\*\*CpG\*\*\* than sequences contg. sequential uninterrupted methylatable sites.  
 Spacing preferences by the DNA methyltransferase were also obsd. in  
 hemimethylated oligonucleotides, suggesting that this is a general property of  
 the enzyme. Although methylation spreading outside of **CpG**  
 dinucleotides was relatively rare, single-stranded DNA incurred higher levels  
 of de novo methylation at sites other than **CpG** as compared to  
 double-stranded DNA. This indicates less specificity of methylation spreading  
 in single-stranded sequences. Finally, enhanced de novo methylation in the  
 presence of fully methylated **CpG** sites in double-stranded  
 oligonucleotides was not as high as the rates of methylation of hemimethylated  
 \*\*\*CpGs\*\*\* in otherwise identical oligonucleotides. These studies provide  
 further elucidation of the mechanisms and regulation of the methylation  
 spreading process and its potential role in the biol. processes it influences.

L7 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:687131 CAPLUS  
 DOCUMENT NUMBER: 125:320712  
 TITLE: Zinc dependent recognition of a human **CpG**  
 island sequence by the mammalian spermatidal protein  
 TP2  
 AUTHOR(S): Kundu, Tapas Kumar; Rao, Manchanahalli R.  
 Satyanarayana  
 CORPORATE SOURCE: Department of Biochemistry, Center for Genetic  
 Engineering, Bangalore, 560 012, India  
 SOURCE: Biochemistry (1996), 35(49), 15626-15632  
 CODEN: BICHAW; ISSN: 0006-2960  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

Rat spermatidal protein TP2 is a zinc metalloprotein with two atoms of zinc  
 coordinated to cysteine and histidine residues and condenses alternating GC  
 \*\*\*copolymer\*\*\* preferentially in a zinc dependent manner [Kundu, T. K., &

Rao, M. R. S. (1995) Biochem. 34, 5143-5150]. In the present study, we have used a 40-mer oligonucleotide contg. a human **CpG** island sequence to study its interaction with TP2 by gel mobility shift assays. A specific complex was obsd. in the presence of poly(dI).cntdot.poly(dC). Preincubation of TP2 with 10 mM EDTA or 1 mM 1, 10-o-phenanthroline inhibited the complex formation by more than 90%. Competition expts. with various polynucleotides revealed the following order of efficiency: poly(dG-dC).cntdot.poly(dG-dC) > cold homologous oligonucleotide > poly(dA-dT).cntdot.poly-(dA-dT). Homoduplexes poly(dG).cntdot.poly(dC) and poly(dA).cntdot.poly(dT) had no effect on the complex formation. Chromomycin A3, a GC minor groove binding drug, inhibited the complex formation. Methylation of the **CpG** doublet within the **CpG** island sequence by SssI methylase (**CpG** methylase) completely abolished the complex formation. Methylation of G at the N-7 position with di-Me sulfate did not affect the recognition of **CpG** island by TP2. Thus, **CpG** islands, widely distributed in the mammalian genome, may serve as specific loci for initiation of chromatin condensation by TP2 during the later stages of spermiogenesis.

L7 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:600999 CAPLUS

DOCUMENT NUMBER: 126:8465

TITLE: Systematic examination of support types in automated synthesis of long oligodeoxyribonucleotides

AUTHOR(S): Birch-Hirschfeld, Eckhard; Eickhoff, Holger; Stelzner, Axel; Greulich, Karl Otto; Foeldes-Papp, Zeno; Seliger, Hartmut; Guehrs, Karl-Heinz

CORPORATE SOURCE: Institute Virology, Friedrich-Schiller-Universitaet, Jena, D-07745, Germany

SOURCE: Collection of Czechoslovak Chemical Communications (1996), 61(Spec. Issue), S311-S314  
CODEN: CCCCCK; ISSN: 0010-0765

PUBLISHER: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

A nonporous support material consisting of a polytetrafluoroethylene core surrounded by a thin layer of polystyrene carrying the anchored nucleoside was compared with com. materials in the synthesis of long oligonucleotides. Using std. synthesizer cycles overall yields better or comparable to those with com. wide pore **CPG** (controlled pore glass) materials were obtained in syntheses of oligonucleotides with target lengths between 100 and 150 nucleotides. Therefore, the concept of chain growth at outer surfaces rather than in pores became attractive in efforts to synthesize long oligonucleotides. Analyses by capillary gel electrophoresis of syntheses products obtained with CPG1000 as well as with PTFE/PS support materials showed that truncated mols. were almost uniformly distributed in the length interval from 1 up to N-5. Only the portions of mis-sequences near the target lengths were increased but small compared to the desired products. Further efforts are necessary to reduce the amt. of this length fractions because their sepn. from targeted mols. is extremely difficult.

L7 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:701336 CAPLUS

DOCUMENT NUMBER: 124:9253

TITLE: Improved conditions for solid phase synthesis of oligonucleotides on PS-PEG **copolymers**

AUTHOR(S): Bayer, Ernst; Bleicher, Konrad; Maier, Martin

CORPORATE SOURCE: Dep. of Organic Chemistry, Univ. of Tuebingen, Tuebingen, D-72076, Germany

SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (1995), 50(7), 1096-100

CODEN: ZNBSEN; ISSN: 0932-0776  
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

Polystyrene-polyethylene glycol (PS-PEG) tentacle polymers with loadings of up to 60 .mu.mol/g were used for std. oligonucleotide synthesis. As these resins are easy to handle and stable under reaction and cleavage conditions they may be used alternatively to controlled pore glass (CPG) as the most commonly used solid support for oligonucleotide synthesis. However, structural and chem. properties of the PS-PEG resins require modified conditions to guarantee syntheses with high coupling efficiencies. Oligodeoxyribonucleotides (ODN) of various sequences and lengths have successfully been synthesized using HPLC and capillary electrophoresis (CE) for purity control. Addnl., electrospray mass spectrometry (ES-MS) was used for product identification.

L7 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:547079 CAPLUS  
DOCUMENT NUMBER: 123:112597  
TITLE: Optimized solid phase synthesis of oligonucleotides using polyethylene glycol/polystyrene **copolymers**  
AUTHOR(S): Gruebler, Gerald; Straubinger, Hartmut; Reinig, Wolfgang; Echner, Hartmut; Geiger, Marcela; Voelter, Wolfgang  
CORPORATE SOURCE: Physiologisch-chemisches Institut, Universitat Tübingen, Tübingen, D-72076, Germany  
SOURCE: Innovation Perspect. Solid Phase Synth. Collect. Pap., Int. Symp., 3rd (1994), Meeting Date 1993, 191-6.  
Editor(s): Epton, Roger. Mayflower Worldwide Ltd.: Birmingham, UK.  
CODEN: 61DRAD  
DOCUMENT TYPE: Conference  
LANGUAGE: English  
ABSTRACT:

A symposium on Merrifield oligodeoxyribonucleotide syntheses using phosphoramidites and an automatic ECOSYN D 100 synthesizer (Eppendorf/Biotronik, Maintal, Germany) on controlled pore glass (CPG) and a polyethylene glycol/polystyrene **copolymer**. Based on quantities of the functionalized starting solid supports, the yields of the target nucleotides can be increased about 10 fold at even improved purities using the **copolymer**- instead of CPG-coupled protected nucleosides.

L7 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:656233 CAPLUS  
DOCUMENT NUMBER: 121:256233  
TITLE: New and efficient solid support for the synthesis of nucleic acids  
AUTHOR(S): Reddy, M. P.; Michael, M. A.; Farooqui, Firdous; Girgis, N. S.  
CORPORATE SOURCE: Advanced Technology Cent., Beckman Instruments Inc., Fullerton, CA, 92634, USA  
SOURCE: Tetrahedron Letters (1994), 35(32), 5771-4  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

Controlled pore glass (CPG) is presently the most widely used solid support for the solid phase synthesis of nucleic acids. We have in our study explored the use of several org. solid supports as alternatives to CPG and found Fractogel (Toyopearl) solid support which is a methacrylate -

vinylidene **copolymer** as an efficient one. This support was derivatized with the nucleosides through the optimized spacer arm to furnish nucleoside loadings of up to 125 .mu.mole/gm. Oligonucleotides of various lengths have been successfully synthesized and analyzed. The integrity of the synthesized oligonucleotides has been established.

L7 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1987:637197 CAPLUS

DOCUMENT NUMBER: 107:237197

TITLE: A comparative analysis of polymeric supports for automatic oligonucleotide synthesis

AUTHOR(S): Gryaznov, S. M.; Potapov, V. K.

CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, USSR

SOURCE: Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya (1987), 28(1), 85-8

CODEN: VMUKA5; ISSN: 0579-9384

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ABSTRACT:

Polymeric supports, e.g., (CPG-500 (a powd. glass with a pore diam. of 500 .ANG.), silochrome C-80 (a silica gel deriv.), and a teflon-polyvinyl alc. **copolymer**, for automatic synthesis of oligonucleotides were compared in the "Victoria 3" synthesizer. The yield of AcGGAT was 38, 34, and 30%, resp.

L7 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1983:216365 CAPLUS

DOCUMENT NUMBER: 98:216365

TITLE: Determination of gel content of acrylic latexes by size exclusion chromatography

AUTHOR(S): Malihi, Farrokh B.; Kuo, Cheng Yih; Provder, Theodore

CORPORATE SOURCE: Glidden Coat. Resins, SCM Corp., Strongsville, OH, 44136, USA

SOURCE: Journal of Liquid Chromatography (1983), 6(4), 667-83

CODEN: JLCHD8; ISSN: 0148-3919

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The gel content of emulsion-prepd. Bu acrylate-Me methacrylate \*\*\*copolymer\*\*\* [25852-37-3] latexes with .ltoreq.70% gel content was measured by size-exclusion chromatog. THF was used as the solvent for the latex and the chromatog. mobile phase. To optimize the sepn., various pore sizes of controlled porosity glass (CPG-10) column packing were tested. Best results were obtained for a combination of three columns (3/8 in. internal diam. and 4 ft long) packed with 75, 380, and 729-.ANG. porosity \*\*\*CPG\*\*\* packings. The chromatog. results, with anal. time of <2 h, compared favorably with those of the conventional gravimetric gel-content method.

L7 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1982:74647 CAPLUS

DOCUMENT NUMBER: 96:74647

TITLE: Column for adsorption of blood protein

INVENTOR(S): Nakashima, Toshihide; Tanihara, Masao; Takakura, Koichi

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2480606	A1	19811023	FR 1981-7714	19810416
FR 2480606	B1	19841130		
JP 56147710	A2	19811116	JP 1980-50733	19800416
JP 01003170	B4	19890119		
JP 56147711	A2	19811116	JP 1980-50734	19800416
JP 57056038	A2	19820403	JP 1980-131804	19800922
JP 57056039	A2	19820403	JP 1980-131805	19800922
JP 57075141	A2	19820511	JP 1980-152457	19801029
US 4384954	A	19830524	US 1981-250630	19810403
GB 2075362	A	19811118	GB 1981-11578	19810413
DE 3115608	A1	19820318	DE 1981-3115608	19810416
DE 3115608	C2	19850822		
US 4421684	A	19831220	US 1982-383137	19820528
PRIORITY APPLN. INFO.:			JP 1980-50733	19800416
			JP 1980-50734	19800416
			JP 1980-131804	19800922
			JP 1980-131805	19800922
			JP 1980-152457	19801029
			US 1981-250630	19810403

## ABSTRACT:

A column for selective adsorption of blood proteins has an inlet and an outlet for blood, each equipped with filters, and between the filters, a porous material coated with a hydrophilic polymer. The column is used for the treatment of cancer, autoimmune diseases, and liver insufficiency. Thus, porous glass (CPG-10-75, av. diam. 90 .ANG.) was treated with .gamma.-aminopropyltriethoxysilane and then with succinic anhydride, and coated with glycidyl methacrylate-hydroxyethyl methacrylate-methacrylic acid \*\*\*copolymer\*\*\* [35429-31-3] soln. to give a product that selectively adsorbed lysozyme [9001-63-2] (mol. wt. 14,600) and cytochrome C [9007-43-6] (mol. wt. 12,800), but not serum albumins (mol. wt. .apprx.60,000). Porous material with an av. diam. >150 .ANG. had low selectivity for lysozyme or serum albumins. The adsorption of specific blood proteins depended on the pore diam. of the adsorbent.

L7 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:502551 CAPLUS

DOCUMENT NUMBER: 89:102551

TITLE: DNA-methylase from regenerating rat liver: purification and characterization

AUTHOR(S): Simon, D.; Grunert, F.; Von Acken, U.; Doering, H. P.; Kroeger, H.

CORPORATE SOURCE: Abt. Biochem., Robert Koch-Inst., Berlin, Fed. Rep. Ger.

SOURCE: Nucleic Acids Research (1978), 5(6), 2153-67

CODEN: NARHAD; ISSN: 0301-5610

DOCUMENT TYPE: Journal

LANGUAGE: English

## ABSTRACT:

DNA methylase was purified 660-fold from nuclei from regenerating rat liver. The enzyme methylates single-stranded (ss) and double-stranded (ds) DNA, the only reaction product being 5-methylcytosine. Previously unmethylated double-stranded DNA from prokaryotes (*Micrococcus luteus*) as well as from eukaryotes (*Ascaris suis*) can serve as substrates. The synthetic \*\*\*copolymers\*\*\* (dG-dC)n.cntdot.(dC-dG)n and (dG,dC)n are also methylated. Although SV40 DNA is hardly methylated, PM2 DNA is a good substrate even in the supercoiled form. The enzyme methylates 1 in 17 bases in heterologous *M. luteus* DNA, but only 1 in 590 in homologous rat liver DNA. The high methylation level of *M. luteus* DNA, an anal. of the methylated pyrimidine isostichs, and a preliminary dinucleotide anal. suggest that all the



\*\*\*CpGs\*\*\* in a DNA can be methylated.

L7 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1972:500296 CAPLUS  
DOCUMENT NUMBER: 77:100296  
TITLE: Low temperature emission spectra of poly(G),  
poly(G).poly(C), and poly(G,C)  
AUTHOR(S): Kleinwachter, V.  
CORPORATE SOURCE: Cesk. Akad. Ved, Brno, Czech.  
SOURCE: Collection of Czechoslovak Chemical Communications  
(1972), 37(7), 2333-42  
CODEN: CCCCAC; ISSN: 0010-0765  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

The fluorescence max. of poly(G) and poly(G).poly(C) are shifted to lower energies as compared with the spectrum of monomeric GMP, and correspond to the emission from excimer states. The excimer peak of poly(G).poly(C) is red-shifted relative to that of either poly(G) or poly(C). The singlet emission of poly(G,C) is identical with that of the dinucleotide **CpG** and consists of two peaks. The low energy one corresponds to the excimer emission, the other one to the emission from the non-interacting residues. The phosphorescence spectra of the three polynucleotides are similar to the spectrum of GMP, but slightly red shifted. The phosphorescence decay is non-exponential. Besides the component characteristic of the guanine residues it contains a short-lived component, which corresponds to the triplet emission of mutually interacting chromophores. The total quantum yield of poly(G) is slightly reduced relative to that of GMP, however, no further decrease accompanies the formation of the H-bonded complex poly(G).poly(C). The quantum yield of the **copolymer** poly(G,C) is substantially lower. The energy of single stranded polynucleotide or oligonucleotide excimer states can be modified on formation of an H-bonded complex having ordered conformation with another polynucleotide. In the interpretation of DNA low temp. luminescence spectra the contribution of guanine-cytosine pairs should be considered. The quantum yield of DNA excimer emission depends primarily on interactions of neighboring bases in one strand and is detd. by base sequence.

=> DIS L4 1- IBIB IABS  
YOU HAVE REQUESTED DATA FROM 25 ANSWERS - CONTINUE? Y/(N):Y  
THE ESTIMATED COST FOR THIS REQUEST IS 63.53 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L4 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:1007594 CAPLUS  
DOCUMENT NUMBER: 140:47483  
TITLE: Compositions and methods for systemic inhibition of  
cartilage degradation  
INVENTOR(S): Demopoulos, Gregory A.; Palmer, Pamela Pierce; Herz,  
Jeffrey M.  
PATENT ASSIGNEE(S): Omeros Corporation, USA  
SOURCE: U.S. Pat. Appl. Publ., 71 pp., Cont.-in-part of U.S.  
Ser. No. 31,546.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 14  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003235589	A1	20031225	US 2003-356649	20030131

AU 2000011277	A5	20000508	AU 2000-11277	19991020
EP 1261334	A1	20021204	EP 1999-955097	19991020
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
WO 2000025745	A2	20000511	WO 1999-US26330	19991105
WO 2000025745	A3	20000824		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2001007067	A2	20010201	WO 2000-US19864	20000721
WO 2001007067	A3	20010329		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002028798	A1	20020307	US 2001-839633	20010420
PRIORITY APPLN. INFO.:				
			US 1998-105026P	P 19981020
			US 1998-107256P	P 19981105
			US 1999-144904P	P 19990721
			WO 1999-US24625	A2 19991020
			WO 1999-US26330	A2 19991105
			WO 2000-US19864	W 20000721
			US 2001-839633	A2 20010420
			US 2002-31546	A2 20020118
			US 2002-353552P	P 20020201
			US 1994-353775	B2 19941212
			WO 1995-US16028	A2 19951212
			US 1996-670699	A2 19960626
			US 1998-72913	A2 19980504
			US 1998-105029P	P 19981020
			US 1998-105044P	P 19981020
			US 1998-105166P	P 19981021
			WO 1999-US24557	A2 19991020
			WO 1999-US24558	A2 19991020
			WO 1999-US24672	A2 19991020

ABSTRACT:

Methods and compns. for inhibiting articular cartilage degrdn. are disclosed. The compns. preferably include multiple chondroprotective agents, including at least one agent that promotes cartilage anabolic activity and at least one agent that inhibits cartilage catabolism. The compns. may also include one or more pain and inflammation inhibitory agents. The compns. may be administered systemically, such as to treat patients at risk of cartilage degrdn. at multiple joints, and suitably may be formulated in a carrier or delivery vehicle that is targeted to the joints. Alternatively the compns. may be injected or infused directly into the joint.

L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:777909 CAPLUS

DOCUMENT NUMBER: 139:278018

TITLE: Method of fixing macromolecules to a conducting or semiconducting surface by means of electrografting, surfaces thus obtained and applications thereof

INVENTOR(S): Bureau, Christophe; Deniau, Guy; Gonzalez, Jose;  
 Palacin, Serge  
 PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.  
 SOURCE: PCT Int. Appl., 46 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080748	A1	20031002	WO 2003-FR877	20030319

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FR 2837842 A1 20031003 FR 2002-3796 20020326  
 PRIORITY APPLN. INFO.: FR 2002-3796 A 20020326

# ABSTRACT:

Conducting and semiconducting surfaces are coated by electrolyzing electrolyte solns. or emulsions of macromols. having .gtoreq.1 electroactive group in cells having the surfaces to be coated as the working electrodes and electrodes causing electroredn. or electrooxidn. of the electrolyte soln. or emulsion contg. .gtoreq.50 ppm protons. Thus, a glass plate coated by chromium and overcoated by Au was polarized in a cell contg. 0.04 mol/L polyethylene glycol dimethacrylate (d.p. 4) in DMF and 0.05 mol/L tetraethylammonium perchlorate with the proton content being >50 ppm under voltammetric conditions: 10 scans with Einitial = -0.5 V/(Ag+/Ag) and Efinal = -2.7 V/(Ag+/Ag) at speed 100 mV/s to provide a 100 nm thick coating on the Au.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:434741 CAPLUS

DOCUMENT NUMBER: 139:18339

TITLE: Polycation-grafted biocompatible **copolymers** for delivery of nucleic acids to target cells

INVENTOR(S): Wang, Laixin

PATENT ASSIGNEE(S): Salus Therapeutics, USA

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

# PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003046185	A1	20030605	WO 2002-US20565	20020626

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-996507 A 20011128

ABSTRACT:

The invention presents polycation-grafted **copolymers** exhibiting substantial water soly. and low toxicity. The **copolymers** can be used to deliver drug and other therapeutic agents to specifically targeted cells. Thus, PEI of various mol. wts. were grafted to PEG polymers via propionic acid or Gly-Phe-Lys-Gly linkers. The polymers contg. 8-15 grafted polycationic chains were successfully used to transfect HT1080 cells with plasmid DNA.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:868787 CAPLUS

DOCUMENT NUMBER: 137:358231

TITLE: Coated combination vaso-occlusive device

INVENTOR(S): Ken, Christopher G. M.; Patel, Tina J.

PATENT ASSIGNEE(S): Concentric Medical, USA

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002089865	A2	20021114	WO 2002-US14169	20020506
WO 2002089865	A3	20030220		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

US 2001-288467P P 20010504

ABSTRACT:

Methods, compns. and app. are disclosed for treating abnormal conditions within a body. The app. includes vaso-occlusion devices each comprising a core formed of a metal, metal alloy, or non-metal material. Each core is coated with a polymer material that can include a bioactive agent. The methods include treating patients having abnormal blood flow at a site in their body by implanting such a coated vaso-occlusive device into the body at the site of the abnormal blood flow. The methods also include a method of making the vaso-occlusion devices. The compns. include coatings for the vaso-occlusive devices.

L4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:716321 CAPLUS

DOCUMENT NUMBER: 137:246527

TITLE: Multivalent MHC constructs: Immunoanalysis, diagnosis and therapy

INVENTOR(S): Winther, Lars; Petersen, Lars Oestergaard; Buus, Soeren; Schoeller, Joergen; Ruub, Erik; Aamellem, Oeystein

PATENT ASSIGNEE(S): Dako A/S, Den.; Dynal Biotech Asa

SOURCE: PCT Int. Appl., 304 pp.

DOCUMENT TYPE: CODEN: PIXXD2  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: 1 English  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072631	A2	20020919	WO 2002-DK169	20020313
WO 2002072631	C1	20021128		
WO 2002072631	A3	20031106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1377609	A2	20040107	EP 2002-706685	20020313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:				
DK 2001-435 A 20010314				
DK 2001-436 A 20010314				
DK 2001-441 A 20010314				
US 2001-275447P P 20010314				
US 2001-275448P P 20010314				
US 2001-275470P P 20010314				
WO 2002-DK169 W 20020313				

ABSTRACT:

The authors disclose MHC mol. constructs (classical and non-classical) conjugated to sol. or insol. carriers wherein the affinity and avidity of the constructs exceed that of comparable MHC tetramers. In one example, the construct is comprised of biotinylated HLA-A2 bound to FITC-labeled streptavidin conjugated to sol. derivatized dextran. The above construct loaded with MART-1 or influenza virus peptides was shown to effect T-cell activation at a lower concn. than. Also comprised by the present invention is the sample-mounted use of MHC mols., MHC mol. multimers, and MHC mol. constructs.

L4 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:675881 CAPLUS

DOCUMENT NUMBER: 137:222038

TITLE: Carrier systems comprising vitamin B12-biodegradable microparticulate conjugates for peroral delivery of drugs, peptides/proteins and vaccines

INVENTOR(S): Chalasani, Kishore Babu; Diwan, Prakash Vamanrao; Raghavan, Kondapuram Vijaya; Russell-Jones, Gregory John; Jain, Sanjain Kumar; Rao, Kollipara Kotesawa

PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002067995	A1	20020906	WO 2001-IN27	20010226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 GB 2374010 A1 20021009 GB 2002-7457 20010226  
 EP 1363672 A1 20031126 EP 2001-915652 20010226  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 US 6482413 B1 20021119 US 2001-795979 20010301  
 US 2002192235 A1 20021219

PRIORITY APPLN. INFO.: WO 2001-IN27 A 20010226

ABSTRACT:

The invention relates to a novel complex for oral delivery of drugs, therapeutic protein / peptides and vaccines which are loaded in a vitamin B12 (VB12) coupled particulate carrier system with spacers in between, the carrier system with spacers having a formula VB12-R1/R2-N wherein, R1 or R2 is spacer and/or agents for derivatization of VB12 to provide either NH2 or COOH or SH groups, and N is the micro- or nano-particle carriers for the delivery of injectable drugs, therapeutic protein/peptides and vaccines. A no. of VB12 derivs. were prepd. and conjugated to modified polysaccharide derivs. such as starch, **chitosan**, dextran, or guar gum.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:658676 CAPLUS  
 DOCUMENT NUMBER: 137:181929  
 TITLE: Simultaneous stimulation and concentration of cells  
 INVENTOR(S): Berenson, Ronald; Law, Che; Bonyhadi, Mark; Saund, Narinder; Craig, Stewart; Hardwick, Alan; Kalamasz, Dale; McMillen, David  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 73 pp., Cont.-in-part of U.S. Ser. No. 794,230.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119568	A1	20020829	US 2001-960264	20010920
US 2002058019	A1	20020516	US 2001-794230	20010226
US 2003124122	A1	20030703	US 2002-133236	20020426
US 2003119185	A1	20030626	US 2002-187467	20020628
WO 2003024989	A2	20030327	WO 2002-US28161	20020903
WO 2003024989	A3	20030626		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003235908  
PRIORITY APPLN. INFO.:

A1 20031225

US 2003-350305 20030122  
US 2000-184788P P 20000224  
US 2000-249902P P 20001117  
US 2001-794230 A2 20010226  
US 2001-960264 A2 20010920  
US 2002-133236 A2 20020426  
US 2002-187467 A 20020628

ABSTRACT:

The present invention relates generally to methods for stimulating cells, and more particularly, to a novel method to conc. and stimulate cells that maximizes stimulation and/or proliferation of such cells. In the various embodiments, cells are stimulated and concd. with a surface yielding enhanced proliferation, cell signal transduction, and/or cell surface moiety aggregation. In certain aspects methods for stimulating a population of cells such as T-cells, by simultaneous concn. and cell surface moiety ligation are provided by contacting the population of cells with a surface, that has attached thereto one or more agents that ligate a cell surface moiety and applying a force that predominantly drives cell concn. and cell surface moiety ligation, thereby inducing cell stimulation, cell surface moiety aggregation, and/or receptor signaling enhancement. Also provided are methods for producing phenotypically tailored cells, including T-cells for the use in diagnostics, drug discovery, and the treatment of a variety of indications, including cancer, viral infection, and immune related disorders. Compns. of cells having specific phenotypic properties produced by these processes are further provided.

L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:487335 CAPLUS

DOCUMENT NUMBER: 137:68153

TITLE: Novel in-situ forming polymer-based controlled release microcarrier delivery systems

INVENTOR(S): Bhagwatwar, Harshal Prabhakar; Bapat, Varada Ramesh; Paithankar, Mahesh Balkrishna; Yeola, Bhushan Subhash; Gosavi, Arun Shriniwas; Bagool, Manoj Anil; Shetty, Nitin; Shukla, Milind Chintaman; De Souza, Noel John; Khorakiwala, Habil Fakhruddin

PATENT ASSIGNEE(S): India

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002049573	A2	20020627	WO 2001-IN219	20011214
WO 2002049573	A3	20030130		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003049320	A1	20030313	US 2001-23427	20011212
AU 2002022505	A5	20020701	AU 2002-22505	20011214
EP 1363556	A2	20031126	EP 2001-271193	20011214
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:

US 2000-256319P P 20001218

## ABSTRACT:

A ready-to use, stable, gelled polymer droplet-in-oil dispersion is described which helps in in-situ formation of a multitude of small solid, semisolid, or gelled microcarriers. The dispersion is placed into a body in a semisolid form and cures to form the delivery system in-situ. The process for making such a dispersion comprises the steps of (i) dissolving a polymer in a biocompatible solvent at an elevated temp. to form a polymer soln., (ii) prepg. a second oil phase soln. of a biocompatible emulsifier at an elevated temp., (iii) mixing the polymer soln. with the oil phase soln. at an elevated temp. and subsequently cooling to refrigeration temp. Placing the gelled dispersion within a body produces the microcarrier delivery system in-situ. The compn. of a syringeable, biodegradable dispersion incorporating an effective level of a biol. active agent before injection into a body provides a novel controlled delivery system of drugs for health-care applications. Thus, Poly(DL-lactide-co-glycolide) was dissolved in DMSO to form a polymer soln. of a 30% wt./wt. concn. To this soln. was added leuprolide acetate to form a 10% wt./wt. soln. of the drug with respect to the polymer. The polymer soln. was injected by into a continuous oil phase comprising a 20% wt./wt. soln. of sorbitan monostearate (Arlacel 60) in super refined sesame seed oil maintained at 70-75.degree., accompanied by high speed homogenization at 13,000 rpm, for 3 min. The resulting polymer droplet-in-oil dispersion was cooled to room temp. with continuous mixing to obtain an opaque mass with a gel-like consistency, which did not flow. The gel was stored under refrigerated conditions until further use. The gel was smooth to the touch with an absence of any gritty particles. Microscopic observation of the gel revealed discrete distorted blue colored droplets of the discontinuous phase dispersed within the continuous oil phase.

L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:350517 CAPLUS

DOCUMENT NUMBER: 138:112154

TITLE: Development of Japanese encephalitis vaccine delivery with **chitosan** and polyesters

AUTHOR(S): Ritthidej, G. C.; Chomto, P.; Lipipun, V.

CORPORATE SOURCE: Department of Industrial Pharmacy, Chulalongkorn University, Bangkok, 10330, Thailand

SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer &amp; Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 2, 1089-1090. Controlled Release Society: Minneapolis, Minn.

CODEN: 69CNY8

DOCUMENT TYPE: Conference

LANGUAGE: English

## ABSTRACT:

JE **antigen-chitosan** microspheres were compared to

\*\*\*antigen\*\*\* -polyester (PLA or PLGA) microspheres. The size of both microspheres was similar whereas the topog. and the loading level were different. The release of protein was affected by amt. of **antigen**, the ratio of **copolymer** or mol. wt. and amt. of **chitosan** but not the amt. of polyester and the sonication rate. Passive diffusion with erosion or degrdn. of polymer was mechanism of release.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:220398 CAPLUS

DOCUMENT NUMBER: 136:252466

TITLE: Injectable hybrid matrix mixtures

INVENTOR(S): Mineau-Hanschke, Rochelle; Lamsa, Justin Chace;



PATENT ASSIGNEE(S): Abalos-Coyle, Deborah  
 SOURCE: Transkaryotic Therapies, Inc., USA  
 PCT Int. Appl., 98 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002022157	A2	20020321	WO 2001-US42085	20010910
WO 2002022157	A3	20030116		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001095028	A5	20020326	AU 2001-95028	20010910
PRIORITY APPLN. INFO.:			US 2000-662037	A1 20000914
			WO 2001-US42085	W 20010910

ABSTRACT:

The invention features a method of delivering a polypeptide to an animal. The method involves introducing into the animal a fluid mixt. contg.: a population of cultured vertebrate cells genetically engineered to express the polypeptide; and a plurality of microcarriers.

L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:107058 CAPLUS  
 DOCUMENT NUMBER: 136:156525  
 TITLE: A biocompatible biomaterial comprising a phospholipid-based artificial membrane  
 INVENTOR(S): Chaikof, Elliot L.; Feng, June; Orban, Janine M.; Liu, Hongbo; Sun, Xue Long; Faucher, Keith M.  
 PATENT ASSIGNEE(S): Emory University, USA  
 SOURCE: PCT Int. Appl., 117 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002009647	A2	20020207	WO 2001-US24020	20010730
W: AU, CA, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
AU 2001083055	A5	20020213	AU 2001-83055	20010730
EP 1317253	A2	20030611	EP 2001-961819	20010730
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRIORITY APPLN. INFO.:			US 2000-221618P	P 20000728
			US 2000-221655P	P 20000728
			US 2000-221828P	P 20000728
			WO 2001-US24020	W 20010730

OTHER SOURCE(S): MARPAT 136:156525

ABSTRACT:

A biocompatible biomaterial (or biol. component) is provided comprising a

membrane-mimetic surface (film) covering a substrate. Suitable substrates include hydrated substrates, e.g., hydrogels which may contain drugs for delivery to a patient through the membrane-mimetic film, or may be made up of cells, such as islet cells, for transplantation. The surface may present exposed bioactive mols. or moieties for binding to target mols. in vivo, for modulating host response when implanted into a patient (e.g. the surface may be antithrombogenic or antiinflammatory) and the surface may have pores of selected sizes to facilitate transport of substances through it. An optional hydrophilic cushion or spacer between the substrate and the membrane-mimetic surface allows transmembrane proteins to extend from the surface through the hydrophilic cushion, mimicking the structure of naturally-occurring cells. An alkylated layer directly beneath the membrane-mimetic surface facilitates bonding of the surface to the remainder of the biol. component. Alkyl chains may extend entirely through the hydrophilic cushion when present. To facilitate binding, the substrate may optionally be treated with a polyelectrolyte or alternating layers of oppositely-charged polyelectrolytes to facilitate charged binding of the membrane-mimetic film or alkylated layer beneath the membrane-mimetic film to the substrate. The membrane-mimetic film is preferably made by in situ polymn. of phospholipid vesicles. For example, a stabilized, polymeric membrane-mimetic surface was produced on an alkylated polyelectrolyte multilayer by in situ photopolymn. of a lipid assembly. Mol. characterization confirmed the generation of a well-ordered supported lipid monolayer, which was stable under high shear flow conditions and capable of modulating interfacial mol. transport. In addn., the ability to use this system as a cell encapsulation barrier was illustrated. The addn. of a stable, supported lipid membrane provides an addnl. mechanism for controlling both the physiochem. and biol. properties of a polyelectrolyte multilayer, thus making it possible to optimize the clin. performance characteristics of artificial organs and other implanted medical devices.

L4 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:935520 CAPLUS  
 DOCUMENT NUMBER: 136:68695  
 TITLE: Delivery vehicle composition and methods for delivering **antigens** and other drugs  
 INVENTOR(S): Rosenthal, Gary J.; Rodell, Timothy C.; Blonder, Joan P.; Coeshott, Claire M.; Schauer, Wren H.  
 PATENT ASSIGNEE(S): Rxkinetix, Inc., USA  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098206	A1	20011227	WO 2001-US20096	20010622
W:				
				AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW:				GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1315672	A1	20030604	EP 2001-954595	20010622
R:				AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:			US 2000-602654	A 20000622
			US 2001-278267P	P 20010323
			WO 2001-US20096	W 20010622

ABSTRACT:

The present invention provides an immunogen compn. and methods for using the same for the development of immunity, and particularly at mucosal sites in a mammal, thereby providing immunity at the site of entry for many major pathogenic organisms and also systemic immunity. The immunogen compn. includes an **antigen**, a biocompatible polymer, and a liq. vehicle, with the biocompatible polymer and liq. vehicle being present in such proportions and interacting in such a way that the immunogen compn. exhibits reverse-thermal viscosity behavior. A delivery vehicle compn. including a drug other than an **antigen** is also provided. Methods are provided for delivering the compns. of the invention to a host.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:900424 CAPLUS

DOCUMENT NUMBER: 137:77483

TITLE: ProJuvant (Pluronic F127/**chitosan**) enhances the immune response to intranasally administered tetanus toxoid

AUTHOR(S): Julie Westerink, M. A.; Louise Smithson, S.; Srivastava, Neeti; Blonder, Joan; Coeshott, Claire; Rosenthal, Gary J.

CORPORATE SOURCE: Department of Medicine, Medical College of Ohio, Toledo, OH, 43614, USA

SOURCE: Vaccine (2001), 20(5-6), 711-723

CODEN: VACCDE; ISSN: 0264-410X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The potential to generate both a systemic and local immune response makes the mucosal system an attractive site for immunization. However, mucosal administration of protein and peptide **antigens** generally results in a poor immune response. Successful mucosal vaccination is therefore largely dependent on the development of effective mucosal adjuvants. In this study we have examd. the effect of mucosal administration of tetanus toxoid (TT) in the presence of a non-ionic block **copolymer**, Pluronic F127 (F127), with **chitosan** or lysophosphatidylcholine (LPC) on the systemic and mucosal immune response. Balb/c mice, immunized i.p. with TT and boosted intranasally (i.n.) with TT in F127/**chitosan**, demonstrated a significant enhancement in the systemic anti-TT antibody response compared to mice boosted i.n. with TT in PBS or mice boosted i.n. with TT in F127/LPC. We detd. the **antigen** specific IgA response in the nasal and lung washes of these animals and found a significant increase in anti-TT mucosal IgA response in the group boosted with TT in F127/**chitosan**. Similarly, mice immunized and boosted i.n. with TT in F127/**chitosan** had a significant enhancement of their systemic anti-TT IgG and mucosal IgA antibody responses compared to the animals immunized and boosted i.n. with TT in PBS or TT in F127/LPC. The results of these studies suggest that F127/**chitosan** represents a novel mucosal vaccine delivery system, consisting of two components, that appear to exert an additive or synergistic effect on the immune response.

late invention

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:636188 CAPLUS

DOCUMENT NUMBER: 135:192521

TITLE: Simultaneous stimulation and concentration of cells

INVENTOR(S): Berenson, Ron; Law, Che; Bonyhadi, Mark; Saund, Narinder; Craig, Stewart; Kalamasz, Dale; Hardwick,

PATENT ASSIGNEE(S): Alan; Mcmillen, David  
 SOURCE: Xcyte Therapies, Inc., USA  
 PCT Int. Appl., 148 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001062895	A2	20010830	WO 2001-US6139	20010226
WO 2001062895	A3	20020228		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1257632 A1 20021120 EP 2001-916241 20010226 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP 2004500095 T2 20040108 JP 2001-562670 20010226 PRIORITY APPLN. INFO.: US 2000-184788P P 20000224 US 2000-249902P P 20001117 WO 2001-US6139 W 20010226				

ABSTRACT:

The present invention relates generally to methods for stimulating cells, and more particularly, to a novel method to conc. and stimulate cells that maximize stimulation and/or proliferation of such cells. In the various embodiments, cells are stimulated and concd. with a surface yielding enhanced proliferation, cell signal transduction, and/or cell surface moiety aggregation. In certain aspects methods for stimulating a population of cells such as T-cells, by simultaneous concn. and cell surface moiety ligation are provided by contacting the population of cells with a surface, that has attached thereto one or more agents that ligate a cell surface moiety and applying a force that predominantly drives cell concn. and cell surface moiety ligation, thereby inducing cell stimulation, cell surface moiety aggregation, and/or receptor signaling enhancement. Also provided are methods for producing phenotypically tailored cells, including T-cells for the use in diagnostics, drug discovery, and the treatment of a variety of indications, including cancer, viral infections, and immune related disorders. Compns. of cells having specific phenotypic properties produced by these processes are further provided.

L4 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:283764 CAPLUS  
 DOCUMENT NUMBER: 134:300759  
 TITLE: Surface modified microspheres with cholera toxin B subunit  
 INVENTOR(S): Jeong, Seo Young; Kwon, Ick Chan; Park, Joo Ae  
 PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001026631 A1 20010419 WO 2000-KR534 20000525

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV,  
MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

KR 2000000265 A 20000115 KR 1999-43354 19991008

PRIORITY APPLN. INFO.: KR 1999-43354 A 19991008

ABSTRACT:

The present invention relates to microspheres whose surface is conjugated with cholera toxin B subunit (CTB), directly or indirectly via polymer spacer, which is useful for an orally administrable formulation of various biol. active substances due to the high uptake efficiency in intestine. The conjugation between FITC, carboxylated polystyrene microspheres and protein was accomplished by carbodiimide coupling. A t-Boc-NH-PEG-NH<sub>2</sub> spacer was used, activation with sulfosuccinimidyl 6-[-3-(2-pyridyldithio)propinamido]hexanoate and treated with dithiothreitol. The cholera toxin B subunit was activated with sulfosuccinimidyl 4-(p-maleimidophenyl)butyrate and the protein unit coupled with activated polystyrene microspheres.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:277929 CAPLUS

DOCUMENT NUMBER: 134:300791

TITLE: Bioadhesive microspheres and their use as drug delivery and imaging systems

INVENTOR(S): Mathiowitz, Edith; Chickering, Donald; Jacob, Jules Serge

PATENT ASSIGNEE(S): Brown University Research Foundation, USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 873,480. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6217908	B1	20010417	US 1993-52473	19930423
US 6197346	B1	20010306	US 1992-873480	19920424
US 6235313	B1	20010522	US 1997-824172	19970326
US 2001016210	A1	20010823	US 2001-773229	20010131
US 6365187	B2	20020402		

PRIORITY APPLN. INFO.: US 1992-873480 A2 19920424  
US 1993-52473 A2 19930423  
US 1997-824172 A1 19970326

ABSTRACT:

Bioadhesive polymers in the form of, or as a coating on, microcapsules contg. drugs or bioactive substances which may serve for therapeutic or diagnostic purposes in diseases of the gastrointestinal tract, are described. The polymeric microspheres all have a bioadhesive force of at least 11 mN/cm<sup>2</sup> (110 N/m<sup>2</sup>). Techniques for the fabrication of bioadhesive microspheres, as well as a method for measuring bioadhesive forces between microspheres and selected segments of the gastrointestinal tract in vitro are also described. This quant. method provides a means to establish a correlation between the chem. nature, the surface morphol. and the dimensions of drug-loaded microspheres on one hand and bioadhesive forces on the other, allowing the screening of the most promising materials from a relatively large group of natural and synthetic

polymers which, from theor. consideration, should be used for making bioadhesive microspheres. For example, an increase in bioadhesion of Dexatrim and Contact coated with poly(fumaric-co-sebacic anhydride) was obsd.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:101011 CAPLUS  
DOCUMENT NUMBER: 134:152708  
TITLE: Universal biocompatible coating platform for medical devices  
INVENTOR(S): Hsu, Li-chien; Hu, Can B.; Tong, Sun-de  
PATENT ASSIGNEE(S): Edwards Lifesciences Corporation, USA  
SOURCE: PCT Int. Appl., 40 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008718	A1	20010208	WO 2000-US20093	20000724
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6309660	B1	20011030	US 1999-362468	19990728
PRIORITY APPLN. INFO.:			US 1999-362468	A 19990728

ABSTRACT:

Universal, biocompatible coating platforms for articles intended to contact physiol. fluids or tissues and assocd. methods of prodn. are disclosed. The coating platforms of the present invention are composed of a polyelectrolyte mol. film contg. one or more biol. active compds. The mol. film is further complexed with the surface of an article by a crosslinked interpenetrating network (IPN) made from at least one multifunctional mol. and at least one crosslinking agent. The IPN may entrap addnl. biol. active compds. within the coating platform, or addnl. biol. active compds. may be bound to its outer surface. The coating platform of the present invention is ideally suited for providing medical devices with anti-thrombogenic coatings. A polypropylene hollow fiber oxygenator was coated with a 0.05 % polyethyleneimine (PEI) soln., then followed by a 0.5 % chondroitin sulfate A soln., a mixt. of 0.05 % PEI and 0.5% ethylene glycol diglycidyl ether, and 0.5 % sodium heparin soln. to obtain antithrombogenic coating.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:53410 CAPLUS  
DOCUMENT NUMBER: 132:83701  
TITLE: Powdery preparation for mucosal administration containing polymeric medicine  
INVENTOR(S): Nomura, Hideaki; Ueki, Yosuke  
PATENT ASSIGNEE(S): Kirin-Amgen Inc., USA  
SOURCE: PCT Int. Appl., 45 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000002574	A1	20000120	WO 1999-JP3563	19990701
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9943958	A1	20000201	AU 1999-43958	19990701
AU 764331	B2	20030814		
BR 9911890	A	20010327	BR 1999-11890	19990701
EP 1093818	A1	20010425	EP 1999-926887	19990701
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 3422775	B2	20030630	JP 2000-558833	19990701
NZ 509710	A	20031031	NZ 1999-509710	19990701
NO 2001000042	A	20010305	NO 2001-42	20010104
ZA 2001000521	A	20010801	ZA 2001-521	20010118
BG 105169	A	20011231	BG 2001-105169	20010118
PRIORITY APPLN. INFO.:			JP 1998-192722 A	19980708
			JP 1999-81549 A	19990325
			WO 1999-JP3563 W	19990701

ABSTRACT:

A powdery prepn. for mucosal administration comprises a polymeric medicine and a cationic polymer. The prepn. is formed by adding a cationic polymer [esp. an aminoalkyl methacrylate **copolymer** or poly(vinyl acetal diethylaminoacetate)] to a polymeric medicine, optionally further adding a thickening polymer, and powdering the mixt. Thus, the polymeric medicine can be effectively absorbed through a mucous membrane. A soln. was formulated contg. G-CSF 20, poly(L-arginine) 20, sucrose 26, and buffer soln. q.s. to 100 %. The obtained soln. was spray-dried to give a powder for nasal administration.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:262164 CAPLUS

DOCUMENT NUMBER: 130:316624

TITLE: Microparticulate and nanoparticulate polymeric delivery systems

INVENTOR(S): Prokop, Ales

PATENT ASSIGNEE(S): Vanderbilt University, USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9918934	A1	19990422	WO 1998-US21455	19981009
W:	AU, CA, JP			
RW:	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			

AU 9897991 A1 19990503 AU 1998-97991 19981009  
 EP 1021168 A1 20000726 EP 1998-952243 19981009  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI

PRIORITY APPLN. INFO.:

US 1997-62943P P 19971009  
 WO 1998-US21455 W 19981009

ABSTRACT:

The present invention provides a method of making particles useful in drug delivery, comprising the steps of: contacting polyanionic polymers with cations in a stirred reactor so that polyanions and the cations react to form particles. Nanoparticles were generated by using a droplet-forming polyanionic soln. composed of 0.1% high-viscosity sodium alginate and 0.05% chondroitin sulfate C in water and corona-forming polycationic soln. composed of 0.1% spermine-HCl, 0.01% poly(L-lysine-HCl) and 0.2% calcium chloride in water. The ratio of droplet- to corona-forming reactants was 1.0:20. The particles were instantaneously formed in a batch system, allowed to react for 2 h and their size and charge evaluated in the reaction mixt. The av. size was 280 nm and the av. charge 20.1 mV. Particles were stable as individual entities during 4-wk period at 4.degree.. The size of particles tended to increase upon their processing (washing in saline or water), if not stabilized.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:98309 CAPLUS

DOCUMENT NUMBER: 128:172122

TITLE: Application of nanoparticles based on hydrophilic polymers as pharmaceutical forms

INVENTOR(S): Alonso Fernandez, Maria Jose; Calvo Salve, Pilar; Remunan Lopes, Carmen; Vila Jato, Jose Luis

PATENT ASSIGNEE(S): Universidade de Santiago de Compostela, Spain; Alonso Fernandez, Maria Jose; Calvo Salve, Pilar; Remunan Lopes, Carmen; Vila Jato, Jose Luis

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
✓ WO 9804244	A1	19980205	WO 1996-ES186	19961022
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ES 2114502	A1	19980516	ES 1996-1685	19960729
ES 2114502	B1	19990701		
CA 2233501	AA	19980205	CA 1996-2233501	19961022
EP 860166	A1	19980826	EP 1996-932607	19961022
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, SE, PT				
✓ US 2001051189	A1	20011213	US 2001-908372	20010718
✓ US 6649192	B2	20031118		
PRIORITY APPLN. INFO.:			ES 1996-1685	A 19960729
			WO 1996-ES186	W 19961022
			US 1998-43979	B1 19980522

ABSTRACT:

Nanoparticles based on the hydrophilic polymers, **chitosan** (derivs.) or polyoxyethylene (derivs.), assoc. with high-mol.-wt. active agents in the aq. phase and are useful for administration of these agents without use of org. solvents or auxiliary toxic substances. The loading capacity of the nanoparticles is extremely high, and the active agent is released in a controlled manner over an extended period. The nanoparticles have a pos. surface elec. charge with a magnitude which depends on their compn. Thus, 5 mg



tetanus toxoid was added to 25 mL 0.05M AcOH soln. (pH 5) contg. 0.2 wt.%  
 \*\*\*chitosan\*\*\* , followed by addn. of 10 mL 0.1% tripolyphosphate soln. and  
 stirring for 30 min. The resulting particles had a size of 245 nm, .zeta.  
 potential 35 mV, and 53% binding of the toxoid.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:544101 CAPLUS

DOCUMENT NUMBER: 125:177462

TITLE: Surface-modified nanoparticles and method of making  
 and using them

INVENTOR(S): Levy, Robert J.; Labhasetwar, Vinod; Song, Cunxian S.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 170 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9620698	A2	19960711	WO 1996-US476	19960104
WO 9620698	A3	19980122		
W: AL, AM, AT, AU, CA, CH, CN, CZ, DE, DK, GB, HU, IS, JP, KE, LU, VN, MN, NO, US				
RW: KE, LS, SD, AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, PT, SE, NL, MR, NE, SN				
CA 2207961	AA	19960711	CA 1996-2207961	19960104
AU 9647556	A1	19960724	AU 1996-47556	19960104
EP 805678	A1	19971112	EP 1996-903476	19960104
EP 805678	B1	20031029		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 10511957	T2	19981117	JP 1996-521279	19960104
PRIORITY APPLN. INFO.:				
			US 1995-369541	A 19950105
			US 1995-389893	A 19950216
			WO 1996-US476	W 19960104

#### ABSTRACT:

Biodegradable controlled-release nanoparticles as sustained release bioactive agent delivery vehicles include surface modifying agents to target binding of the nanoparticles to tissues or cells of living systems, to enhance nanoparticle sustained release properties, and to protect nanoparticle-incorporated bioactive agents. Unique methods of making small (10 nm to 15 nm, and preferably 20 nm to 35 nm) nanoparticles having a narrow size distribution which can be surface-modified after the nanoparticles are formed is described. Techniques for modifying the surface include a lyophilization technique to produce a phys. adsorbed coating and epoxy-derivatization to functionalize the surface of the nanoparticles to covalently bind mols. of interest. The nanoparticles may also comprise hydroxy-terminated or epoxide-terminated and/or activated multiblock **copolymers**, having hydrophobic segments which may be polycaprolactone and hydrophilic segments. The nanoparticles are useful for local intravascular administration of smooth muscle inhibitors and antithrombogenic agents as part of interventional cardiac or vascular catheterization such as a balloon angioplasty procedure; direct application to tissues and/or cells for gene therapy, such as the delivery of osteotropic genes or gene segments into bone progenitor cells; or oral administration in an enteric capsule for delivery of protein/peptide based vaccines.

L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:733339 CAPLUS

DOCUMENT NUMBER: 123:107261

TITLE: Polymer with amide or o-nitrobenzyl ester or phenylazide group for biosubstance immobilization  
 INVENTOR(S): Funayama, Masashi  
 PATENT ASSIGNEE(S): Funayama Masashi, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07134127	A2	19950523	JP 1993-204411	19930627

PRIORITY APPLN. INFO.: JP 1993-204411 19930627

ABSTRACT:

Disclosed are methods for immobilization of ligand on water-insol. carriers or medical devices. The methods include (1) coating a layer of azide group-contg. polymer and a layer of ligand on carriers, and immobilizing the ligand by photosensitization, (2) forming a layer of o-nitrobenzyl ester group-contg. \*\*\*copolymer\*\*\*, generating carboxy group by photoactivation, and immobilizing ligand by condensation, and (3) introducing phenylazide group on carriers by reacting with p-azidobenzoyloxy succinimide, coating a layer of ligand, and immobilizing ligand by photoactivation. Ligand for immobilization is selected from monoclonal antibody to white blood cell differentiating \*\*\*antigen\*\*\*, heparin-antithrombin III complexes, heparin-antithrombin III-factor Xa complexes, haptoglobin, Hb, etc. In example, 3-azidostyrene was synthesized and used to form **copolymer** with styrene. Polyethyleneterephthalate film coated with the prepd. **copolymer** and treated with m-aminomethylboronic acid for capturing Hb Alc. The captured Hb Alc was then quantified by enzyme-labeled antibody.

L4 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:350966 CAPLUS  
 DOCUMENT NUMBER: 122:114998  
 TITLE: Methods and compositions for aiding periodontal tissue regeneration  
 INVENTOR(S): Damani, Nalinkant Chunilal; Mohl, Douglas Charles; Singer, Robert Ernest, Jr.  
 PATENT ASSIGNEE(S): Procter and Gamble Co., USA  
 SOURCE: PCT Int. Appl., 15 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9428935	A1	19941222	WO 1994-US5952	19940526
W: CA, CN, JP, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5447725	A	19950905	US 1993-76304	19930611
CA 2164933	AA	19941222	CA 1994-2164933	19940526
CA 2164933	C	19990112		
EP 702567	A1	19960327	EP 1994-917486	19940526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1126948	A	19960717	CN 1994-192670	19940526
JP 08511528	T2	19961203	JP 1994-501855	19940526
PRIORITY APPLN. INFO.:			US 1993-76304	19930611
			WO 1994-US5952	19940526

ABSTRACT:

Methods for aiding periodontal tissue regeneration with compns. contg.

bioresorbable polymers, leachable solvents, and bioavailable drug actives. The compns. useful for these methods are characterized by becoming harder upon contact with the periodontal tissue such that the compn. is effective for aiding tissue regeneration and by releasing a therapeutically-effective amt. of drug active agent.

L4 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:62281 CAPLUS  
DOCUMENT NUMBER: 120:62281  
TITLE: Bioadhesive microspheres and their use as drug delivery and imaging systems  
INVENTOR(S): Mathiowitz, Edith; Chickering, Donald; Jacob, Jules Serge  
PATENT ASSIGNEE(S): Brown University Research Foundation, USA  
SOURCE: PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9321906	A1	19931111	WO 1993-US3822	19930423
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6197346	B1	20010306	US 1992-873480	19920424
AU 9341130	A1	19931129	AU 1993-41130	19930423
EP 671906	A1	19950920	EP 1993-910745	19930423
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08502949	T2	19960402	JP 1993-519391	19930423
PRIORITY APPLN. INFO.:			US 1992-873480	A 19920424
			WO 1993-US3822	A 19930423

#### ABSTRACT:

Bioadhesive polymers in the form of, or as a coating on, microcapsules contg. drugs or bioactive substances which may serve for therapeutic, or diagnostic purposes in diseases of the gastrointestinal tract, are described. The polymeric microspheres all have a bioadhesive force of .gtoreq.11 mN/cm<sup>2</sup> (110 N/m<sup>2</sup>). Techniques for the fabrication of bioadhesive microspheres, as well as a method for measuring bioadhesive forces between microspheres and selected segments of the gastrointestinal tract in vitro are also described. This quant. method provides a means to establish a correlation between the chem. nature, the surface morphol., and the dimensions of drug-loaded microspheres on one hand and bioadhesive forces on the other, allowing the screening of the most promising materials from a relatively large group of natural and synthetic polymers which, from theor. consideration, should be used for making bioadhesive microspheres. Thus a soln. of alginate which contained Tonopaque contrast medium was used to prep. alginate beads, which were subsequently activated with carbonyldiimidazole. Ulex europaeus lectin (with high affinity for terminal .alpha.-L-fucose residues of mucin in the gastrointestinal tract) was coupled to the activated beads. When the beads were incubated with everted rat small intestine, nearly 100% of the beads attached to the mucosa/mucin layer within 5 min and remained firmly bound for .gtoreq.3 h.

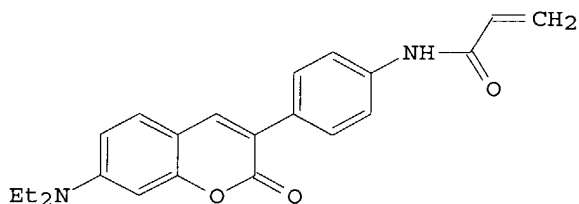
L4 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:644956 CAPLUS  
DOCUMENT NUMBER: 119:244956  
TITLE: Optical solid-phase biosensor, with fluorescence-labeled polyionic layers  
INVENTOR(S): Siegmund, Hans Ulrich; Heiliger, Ludger; Van Lent, Boudewijn; Becker, Arno  
PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 561239	A1	19930922	EP 1993-103585	19930305
EP 561239	B1	19980603		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
DE 4208645	A1	19930923	DE 1992-4208645	19920318
AT 166974	E	19980615	AT 1993-103585	19930305
JP 06027106	A2	19940204	JP 1993-77450	19930312
JP 3456660	B2	20031014		
CA 2091635	AA	19930919	CA 1993-2091635	19930315
US 5711915	A	19980127	US 1995-547272	19951024
PRIORITY APPLN. INFO.:			DE 1992-4208645	A 19920318
			US 1993-28858	B1 19930310

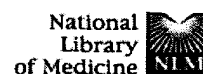
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# ABSTRACT:

The title biosensor for detection of a fluorescent-labeled analyte in soln. bears .gtoreq.1 surface polyionic layer to which are bound an analyte receptor and a 2nd fluorophore. The analyte is detd. from the Foerster radiationless energy transfer between the 2 fluorophores as measured by the change in their relative fluorescence intensities. If unlabeled, the analyte may be detd. by displacement of a fluorescent-labeled analog from the polyionic layer. Thus, a glass slide was coated successively with polylysine, with azobisisobutyronitrile-crosslinked K sulfopropyl methacrylate **copolymer** with coumarin II (I), and with digitoxigenin-derivatized polylysine. Contact of this biosensor with TRITC-labeled anti-digoxin IgG resulted in quenching of the I fluorescence.



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- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.

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#20	Search <b>copolymer and chitosan</b>	13:33:29	<u>32</u>
#18	Search <b>Pluronic and chitosan</b>	13:32:55	<u>7</u>
#19	Search <b>Pluronic and chitosan</b> Field: <b>All Fields</b> , Limits: <b>Publication Date to 2001/03/23</b>	13:32:49	<u>0</u>
#17	<b>Related Articles for PubMed</b> (Select 11738734)	13:31:57	<u>370</u>
#15	Search <b>Rosenthal G 2001 and chitosan</b>	13:31:25	<u>1</u>
#14	Search <b>Rosenthal G 2001</b>	13:31:13	<u>35</u>
#13	Search <b>Rosenthal C 2001</b>	13:30:38	<u>6</u>
#12	Search <b>Westerink J 2001</b>	13:29:56	<u>0</u>
#11	Search <b>Gary J 2001</b>	13:29:30	<u>4</u>
#10	Search <b>Gary J 2001 and chitosan</b>	13:29:24	<u>0</u>
#1	Search <b>Wilson J and ebola</b>	09:52:32	<u>8</u>

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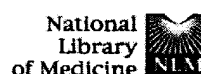
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Display		Abstract	▼	Show: 20	▼	Sort	▼	Send to Text ▼

☐ 1: Vaccine. 2001 Dec 12; 20(5-6): 711-23.

[Related Articles, Links](#)

ELSEVIER  
FULL-TEXT ARTICLE

### **ProJuvant (Pluronic F127/chitosan) enhances the immune response to intranasally administered tetanus toxoid.**

**Westerink MA, Smithson SL, Srivastava N, Blonder J, Coeshott C, Rosenthal GJ.**

Department of Medicine, Medical College of Ohio, 3055 Arlington Avenue, Toledo, OH 43614, USA. mwesterink@mco.edu

The potential to generate both a systemic and local immune response makes the mucosal system an attractive site for immunization. However, mucosal administration of protein and peptide antigens generally results in a poor immune response. Successful mucosal vaccination is therefore largely dependent on the development of effective mucosal adjuvants. In this study we have examined the effect of mucosal administration of tetanus toxoid (TT) in the presence of a non-ionic block copolymer, Pluronic F127 (F127), with chitosan or lysophosphatidylcholine (LPC) on the systemic and mucosal immune response. Balb/c mice, immunized intraperitoneally (i.p.) with TT and boosted intranasally (i.n.) with TT in F127/chitosan, demonstrated a significant enhancement in the systemic anti-TT antibody response compared to mice boosted i.n. with TT in PBS or mice boosted i.n. with TT in F127/LPC. We determined the antigen specific IgA response in the nasal and lung washes of these animals and found a significant increase in anti-TT mucosal IgA response in the group boosted with TT in F127/chitosan. Similarly, mice immunized and boosted i.n. with TT in F127/chitosan had a significant enhancement of their systemic anti-TT IgG and mucosal IgA antibody responses compared to the animals immunized and boosted i.n. with TT in PBS or TT in F127/LPC. The results of these studies suggest that F127/chitosan represents a novel mucosal vaccine delivery system, consisting of two components, that appear to exert an additive or synergistic effect on the immune response.

PMID: 11738734 [PubMed - indexed for MEDLINE]

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